

FISCAL RESEARCH CENTER

FINANCING AN INCREASED STATE ROLE IN FUNDING K-12 EDUCATION: AN ANALYSIS OF ISSUES AND OPTIONS

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Financing an Increased State Role in Funding K-12 Education: An Analysis of Issues and Options

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Introduction

A Constitutional amendment has been proposed that would eliminate local property taxes as a source of funding for school (see Appendix A for the text). This would essentially make the funding of K-12 education in Georgia entirely a State government responsibility. The proposed Constitutional amendment allows for, but does not require, a sales tax, which we refer to as the Education Sales Tax, of up to 3 percent earmarked for education.

A related issue is the lawsuit filed by the Consortium for Adequate School Funding in Georgia and the possibility that the State of Georgia might have to increase education spending to achieve an adequate level of education. Consideration of this issue is relevant since it is important to understand what other financial obligations the State might face regarding education.

This report first provides estimates of the cost to the State government of assuming complete responsibility for funding K-12 education. We also provide an estimate of what it might cost to provide an “adequate” level of education. (Appendix B contains a more complete discussion of the cost and funding of an adequate education if the State does not eliminate school property taxes.) Second, the report discusses the implications of eliminating school property taxes.

Finally, the report presents a set of revenue alternatives, including a sales tax, for funding the increase in cost to the State government and explores the advantages and disadvantages of each revenue option. A summary of the likely impacts of replacing education property taxes with an Education Sales Tax is provided. Included in the options are alternatives to the complete elimination of the property tax.

These options are presented as just that, options, and not a set of recommendations. “All options are not equal” in terms of their impact on long-term revenue, the equity of the tax system, or their impacts on the decisions of consumers and producers in our Georgia economy. Given the limitations of the current sales tax (the relatively narrow base and the reduced growth in sales tax revenue as a result), the State would be advised to consider the long-term implications of a move to a sales tax for funding as critical a public need as education.

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The report does not consider how the level of school expenditures would change for individual school systems should the State government eliminate the school property tax and assume complete responsibility for funding K-12 education. How individual school systems are affected will depend on the formula used to allocate State government revenue to local school systems. Sjoquist, Matthews and Smith (2004) provide an analysis assuming that the State government will allocate revenue on an equal per student basis. But other mechanisms could be adopted.

This report is based in part on three previous reports of the Fiscal Research Center (Matthews 2005; Pandey and Sjoquist 2004; Sjoquist, Matthews and Smith 2004). The analysis relies largely on data for FY 2004, which is the most current data available. The report contains two major parts. Section I contains a summary of the analysis while Section II contains a detailed discussion of the analysis.

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I. A Summary of the Analysis

A. The Cost to the State Government of Eliminating School Property Taxes

A Constitutional amendment has been proposed that would eliminate the authority of local school systems to use the property tax for general operating purposes (Appendix A). The proposed amendment also would allow a State-level sales tax of up to 3 percent, which we refer to as the Education Sales Tax. For the purposes of this sales tax, the amendment would eliminate all current sales tax exemptions unless the General Assembly provided otherwise (a list of these exemptions is provided in Appendix C).

- In FY 2004, school systems raised an estimated \$4,557.4 million in property taxes for general operating purposes.
- To put this in perspective, in FY 2004, the lottery raised \$787 million, the corporation income tax raised \$487 million, and the state sales tax raised \$4,860.9 million.
- 10 school systems collected \$44.2 million from sales taxes for general operating purposes.
- The cost to the State government of eliminating school property taxes will depend upon how much of school property taxes the State government chooses to replace. The proposed amendment does not specify how much of the property tax must be replaced, and thus the State government could:
 - Replace none of the property tax revenue, in which case there would be no cost to the State government. We assume this is not a viable option.
 - Replace total school property tax revenue; the cost to the State government would be \$4,557.4 million (in FY 2004).
 - Increase total school spending beyond the current level; the cost would depend on the level of expenditure per student that is set. Every additional \$100 of expenditures per student would cost the State \$149.8 million (in FY 2004).
- Assuming the State exactly replaces existing property taxes, a major issue is the effect on expenditures per student in each district. The State could:

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- Maintain existing expenditures per student, i.e., hold systems harmless.
 - Equalize spending per student across all systems.
- Rather than completely eliminating school property taxes, the State might consider the following alternatives.
 - Replace the property tax on homesteaded property only. This would cost the State government an estimated \$1.7 billion (in FY 2004).
 - Fund systems equally per student, but allow systems that currently spend more than the per student average to impose a property tax sufficient to maintain their existing expenditure per student. School property tax collections would fall to \$484.0 million. If the State restricted the allowable annual increases for these systems, then over time all systems could be at the same expenditure per student. The cost to the State government would be \$4,557.4 million.

B. Additional Cost of Providing an Adequate Education

The Consortium for Adequate School Funding in Georgia has filed a suit against the State of Georgia, contending that the State government is not providing an adequate education for all students.

- How much might the State have to increase education funding if it loses the court case filed by the Consortium for Adequate School Funding in Georgia?
- The Consortium for Adequate School Funding in Georgia argues that the basic program as defined in the Quality Basic Education (QBE) Act is under-funded by “at least \$1.2 billion in FY 2006.” But the Consortium also states that this amount does not represent the level of funding that would be needed to provide an adequate education, the expectation being that it would cost more than the \$1.2 billion.
- For an estimate of what is required to achieve adequacy we used \$7,500 per student, which is the median estimate for 16 adequacy studies conducted in other states (see Table 1 in Section II for the list of states).
- \$7,500 is the *minimum* expenditure per student averaged across a representative set of students. There would still be variations in expenditures per student by program type and school level.

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- \$7,500 is what is required for standard education programs and associated expenses such as administration. In FY 2004, these expenditures in Georgia were \$6,728 per student. Neither the \$7,500 per student nor the \$6,728 per student includes funding required for construction or special programs such as school nurses, nor does it include federal programs such as Title I.
- If the State set the minimum expenditure at \$7,500 per student and completely eliminated the local school property tax, the cost to the State government would be \$5,734 million.

C. The Effect of Eliminating School Property Taxes

- The proposed Constitutional amendment would eliminate about 55 percent of property taxes collected in Georgia.
- Relative to its neighbors, property taxes in Georgia are high, but nationally, Georgia's property taxes are relatively low.
- About 57 percent of property taxes in Georgia are paid by non-residential property owners; this is not the same as who bears the burden of the tax.
- Some school districts provide an exemption for senior citizens from the school portion of the property tax. This group of property owners would not benefit from the reduction in school property taxes.
- Property taxes are deductible for federal and state income tax purposes; we estimate that the elimination of the school property taxes will result in an increase of \$345 million in federal income taxes paid by Georgians, and \$40 million in state income tax.
- Reducing property taxes will reduce the cost to the State government of the Homeowner Tax Relief Grants, which are used to fund increased homestead exemptions.
- The reduction in property taxes will increase the net returns to investment in physical capital and reduce the cost of housing, thereby increasing investment in property. But the existing research suggests that the effect is small. The results from one study suggest that the property tax rate cut will increase the property tax base by 7.5 percent.
- The reduction in property taxes is only part of the policy change. The property tax revenue will be replaced by an increase in other taxes.

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- To the extent that changes in available funds across school systems lead to changes in the quality of education across school systems, property values will change. In school systems that are able to improve their quality of education, increases in the demand to attend those schools will lead to increases in property values. And vice versa for school systems that experience a decrease in quality.
- Rather than completely eliminating school property taxes, the State might consider reducing or eliminating school property tax on residential property. For example, the State could consider the following alternatives.
 - Increase the homestead exemption.
 - Reduce the assessment ratio for homesteaded or residential property from the current 40 percent to say 20 percent for school funding purposes.
 - Replace school property taxes on residential property with a local school system income tax tied directly to the state income tax. The rate could be uniform across the state or set separately in each school system.

Note that the issues of equity and volatility are considered below in Section E.

D. Options for Raising Revenue

In this section we present a discussion of several alternatives for replacing school property taxes.

1. Option 1. Sales Tax

- If none of the current sales tax exemptions is eliminated, a sales tax rate of nearly 4 percent would be required to replace education property taxes. If most exemptions are eliminated, a 3 percent education sales tax would be sufficient to replace education property taxes.
- An increase in the State sales tax rate to 7 percent will result in a reduction in taxable purchases. This will reduce general fund revenue from the sales tax by about 4 percent, or \$206 million (in FY 2004).
- Currently, there are about 100 sales tax exemptions. Georgia loses an estimated \$7.5 billion annually in sales tax revenue as a result of 19 of these sales tax exemptions.

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- Most of the value of the exemptions are associated with manufacturing and agricultural and are part of Georgia's economic development strategy. How many of the exemptions will in fact not be eliminated for the Education Sales Tax?
- Allowing exemptions for part of the sales tax will add to the administrative complexity of the sale tax and will compromise Georgia's participation in the Streamline Sales Tax Project.
- Increasing the sales tax rate to 7 percent will make state and local sales tax rates higher than any of the counties that border Georgia. This is expected to reduce shopping in Georgia's border counties.
- Because of the sales tax treatment of food for home consumption in Georgia's border counties, the inter-state sale tax rate differentials will be larger than for other goods.
- Georgia's sales tax applies to relatively few services. Two of Georgia's neighbors, Tennessee and Florida, tax almost twice the number of services as Georgia.
- Expanding the sales tax base to include more services could raise additional revenue and/or allow the sales tax rate to be reduced.
- The inclusion of more services would not only increase revenues, but also improve equity between consumers.
- Georgia ranks 11th highest in the U.S. in terms of sales tax revenue per capita; increasing sales tax enough to replace education property taxes would move Georgia to the second highest.
- State sales tax revenue in Georgia per \$1,000 of income declined from \$21.8 in 1980 to \$13.3 in 2004, adjusting for the increase in the sales tax rate.
- In 1996, a sales tax rate of 2.6 percent applied to the existing state sales tax base would have raised enough revenue to replace locally raised school system revenue. The sales tax rate required to replace local education revenue gradually increased, so that by 2004 the required rate was 3.3 percent. This is a 27 percent increase in the sales tax rate required 8 years earlier.
- The implication for replacing education property taxes with an Education Sales Tax is that either spending on education will not grow as fast as it did in the 1990s, or that the State government will have to devote an

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increasing share of its other revenue to K-12 education, or that the sales tax rate will have to be continuously increased.

2. Option 2. Divert Annual Increase

One method for increasing State education funding is to use part of the annual increase in revenues beyond what is currently allocated to education from the annual increase. It is not feasible to fund all of the required cost to replace the school property tax through this means.

- The average annual increase in State government revenues over the past 15 years has been 5.52 percent, which for FY 2005 would imply an increase of \$903 million.
- If the State government increased education funding by \$2 billion by diverting 20 percent of the annual increase in revenue, the target increase of \$2 billion will not be reached until 2023.
- If the desired increase is smaller or the percent diverted is larger, it will take less time to reach the desired increase.
- Diverting a larger part of the annual increase in revenue to education obviously means that other programs will receive less funding and that the state could not respond to other fiscal pressures such as increased health expenditures, costs of environmental protection, and incentives for economic development.

3. Option 3. Income Tax

- The current individual income tax is a relatively broad-based tax with marginal tax rates ranging from 1 to 6 percent. The tax is effectively relatively flat as the top marginal tax rate begins at \$10,000 of Georgia taxable income for married couples filing jointly.
- The individual income tax is a large revenue producer, and could possibly be tapped for substantial increases in overall state revenue.
- Georgia's individual income tax rates are somewhat low relative to neighboring states as well as to the national average. The income tax is closely coupled to the federal income tax base as it uses federal adjusted gross income as its starting point for tax calculation. The tax base excludes social security income and also offers an exclusion of up to \$25,000 of income for retirees.

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- The introduction of a 20 percent tax surcharge on the top tax bracket (effectively increasing the top marginal tax rate from 6 percent to 7.2 percent) would yield a revenue increase of \$1.2 billion per year.
 - Elimination of the non-social security income exemptions for retirees would increase revenues about \$100 million per year.
 - Alternative tax rate and base changes (including changes to the personal exemption and standard deduction) could be imposed to increase revenue substantially, but rate increases that would be in line with neighboring states would yield increases in revenue of up to \$1 to 2 billion. Relative to neighboring states, the personal exemption and standard deduction levels are relatively low and lowering it further to increase revenue would make Georgia's income tax system more of an outlier in terms of the taxation of low income individuals and families.
 - There is room to expand the revenue from the individual income tax with relatively small impacts on individuals' decisions. About one third of any increase in Georgia tax liability will be offset via a federal deduction for the income tax paid in Georgia. As Georgia is slightly below the average in terms of income tax burden on most income classes, there should be little migration or other impact of changes that move Georgia toward the middle of the level of income tax rates or slightly above the average.
4. Option 4. A Georgia Business Enterprise Tax
- A 3 percent business activities tax levied on all business organizations would raise \$4.9 billion in 2006.
 - The base of taxation is equal to the sum of total compensation, interest and dividends paid.
 - Alternatively, the base of taxation could follow the broader base used in a traditional value-added tax, which includes total compensation, rent, interest, and total profit.
 - The tax, as estimated, would include an exemption from filing for small businesses.
 - The BET is a broad based tax imposed on all business organizations including nonprofit organizations with unrelated business income, partnerships, sole proprietorships, S corporations, and C corporations.
 - The BET tax base provides a more stable revenue stream than the corporate income tax base.

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- Since over 60 percent of the base of the BET comes from compensation, it is assumed that about 60 percent of the burden of the tax would fall on labor. The other 40 percent is expected to be borne by owners of capital.
- If the base remains free of deductions, the tax is expected to have fairly low administrative costs since it is simply the sum of total compensation, interest and dividends paid.

5. Option 5. A Compensation Tax for Georgia

- A 4.5 percent educational compensation tax for Georgia could raise \$5.6 billion dollars in 2006.
- Alternatively, the tax could be levied with the Social Security earnings cap in place. In that case, a 4.5 percent compensation tax would raise \$4.7 billion in 2006.
- To minimize administrative costs, the base should match that of the Social Security or Medicare Hospital Insurance payroll tax.
- The compensation tax is not likely to distort the existing balance between consumption and savings.
- The burden of the tax is likely to be borne by labor and not by owners of capital.
- The compensation tax produces a stable but cyclical tax base.
- Based on economic studies of the labor market, it is assumed that the compensation tax will negatively impact the labor force decision of second earners and teenagers but not significantly discourage the work effort of primary workers.

6. Option 6. Inheritance Tax

- Georgia currently levies an estate tax that is equivalent to the allowable federal tax credit for estate tax paid to states.
- In fiscal year 2002, Georgia raised \$123 million in estate taxes.
- However, the federal estate tax state credit is being phased out and lapses on December 31, 2005.
- The State will likely collect no revenue from this source after 2007 unless the Georgia legislature alters the estate tax.

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- There are three options that Georgia might consider:
 - Georgia could change the language in its statute that links it to the federal law. (This is called decoupling.)
 - Another option is partially decoupling. This maintains the state estate tax credit prior to 2001 federal amendments, but adopts the new federal increasing tax credit.
 - A third possibility is that Georgia could adopt an inheritance tax of its own.
- As of June 2005, eighteen states and the District of Columbia had retained their estate taxes.
- Only sizable estates end up having any tax liability; by 2009 only estates worth over \$3.5 million will have any federal estate tax liability.
- In 2002, only 1.3 percent of all estates in Georgia had any tax liability.
- A study by the Department of the Treasury estimated that 91 percent of all federal estate taxes paid come from the estates of people whose annual income exceeds \$190,000 (Lav and Friedman 2001).
- A 1998 survey done by the Department of Treasury found that only 1.4 percent of all estates paying federal estate tax had over half of their assets in a family farm and that only 1.6 percent of all estate tax payers in 1998 had the primary share of their estate as a family owned business (Friedman and Lee 2003).
- The estimated Georgia estate tax revenue is \$129 million (FY 2007) if Georgia fully decoupled and \$104.5 million if it partially decoupled.
- Assuming the highest percent loss due to tax avoidance, Georgia would still collect an estimated \$104.67 million in fiscal year 2006 if it fully decoupled from the federal law and \$87.88 million if it only partially decoupled.
- The additional form should not be any great administrative burden to Georgia as usually less than 1,000 estates per year have any estate tax liability.

7. Option 7. Miscellaneous Taxes

- There is a host of other possible revenue sources, some of which Georgia currently levies and many that are not used in Georgia.

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- The alcohol and tobacco taxes, in total, currently generate about \$360 to \$380 million in revenues.
- This is a small fraction of the revenues necessary for replacing the education property tax.
- Georgia's cigarette tax is about half that of the U.S. median.
- Georgia's excise tax on liquor is about equal to the national median, while Georgia's excise taxes on beer and on wine are well above the national median.
- Large changes in the tax rates are likely to induce large behavioral responses.
- There are many taxes or fees imposed by other states or that have been suggested by others that Georgia could consider.

E. General Issues Regarding Taxation

In this section we first discuss the principles that should be used in evaluating tax policy options. We then discuss two tax issues, namely equity and fairness and volatility of the taxes.

1. Issue 1: Principles for Evaluating Taxes

While no one really likes any tax, there are some taxes and tax systems that do a better job of raising the revenue needed to support public expenditures than others. The following are the basis on which to judge which tax or tax system does a better job.

- *Economic Neutrality.* Taxes that do not interfere very much with decisions made by individuals and businesses are thought to be “better” taxes just for that reason—they do less to disrupt our everyday decisions than do other taxes.
- *Adequacy.* Another principle of taxation is that the revenue yield of a tax structure should be “adequate” to fund necessary public expenditures at reasonable rates.
- *Buoyancy.* As our economy grows, there are increased demands put upon the public sector. If the revenue from a particular tax does not grow as

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the economy grows, government is not able to meet the increased demands of their constituents.

- *Fair and Equitable.* Equity is in some respects in the eye of the beholder; how much progressivity there should or should not be in terms of tax burdens is very much an issue of public debate. The notion of horizontal equity suggests that taxpayers in similar circumstances should be treated similarly by the tax system.
- *Administrative Simplicity.* Taxes should be evaluated against the principles of simplicity and administrative costs.

2. Issue 2: Equity and Fairness

The distribution of tax burdens by income levels differs by tax. A report from the Institute on Taxation and Economic Policy (2003) (ITEP) provides estimates of the distribution by income of the sales tax, property tax, and the personal income tax for each state including Georgia.

- Based on the ITEP report, we find that:
 - both the sales and property taxes are regressive, i.e., effective tax rates fall as one move to higher income groups;
 - the sales tax is more regressive than the property tax;
 - the income tax is progressive.
- We also calculated what an average person might pay in sales, property and income tax for three Georgia counties, Appling, Bullock, and Cobb. We calculated the taxes for three households with incomes of \$20,000, \$40,000 and \$80,000.
- Because of the low house values and tax rates in Appling and Bullock Counties, the households in these two counties would pay more in sales tax than in property taxes. On the other hand, households in Cobb County would pay more in property taxes than sales taxes. Given the progressive nature of the income tax, households with incomes of \$20,000 pay less in income tax, while the other two households pay more income tax than either of the other two taxes.
- In spite of the regressivity of the sales tax, the property tax is perceived to be less fair than the sales tax, due largely to errors in property assessment. Fairness here refers to the equal treatment of those with equal ability to pay.

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- There is less correlation between property tax payments and income than between sales taxes and income. Shifting to a sales tax to fund education would be seen by many as an increase in the horizontal fairness of the tax system.
- To some extent, both the property tax and the sales tax are exported to non-residents of Georgia. The relative share of either tax that is exported is, however, currently unknown.

3. Issue 3: Tax Base Volatility in Georgia

- A more volatile tax is less desirable because it makes budgeting more difficult.
- We measured volatility of the sales tax base, the property tax base, and the income tax base in several different ways.
- For the period 1969 to 2002, the property tax base was the less stable, while the sales tax was the most stable.
- For the past decade, the property tax base has become the more stable while personal income tax revenues base and the sales tax base have become less stable.
- This change in stability is likely due to the state's greater attention to assessment uniformity and more frequent re-assessments, and the effects of the recent recession on income and sales tax bases.

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II. Detailed Analysis

A. The Cost to the State Government of Eliminating School Property Taxes

Driven by a desire to reduce property taxes, a Constitutional amendment has been proposed that would prohibit local school systems from using property taxes for general operating purposes (Appendix A). School systems could continue to use property taxes to pay off existing debt. The amendment allows for a sales tax of up to 3 percent, with the funds earmarked for education. We refer to this as the Education Sales Tax. None of the current sales tax exemptions would apply to this 3 percent sales tax unless the General Assembly voted to do otherwise. (A list of current sales tax exemptions is provided in Appendix C.)

We estimate that school systems raised \$4,557.4 million in general operating property taxes in FY 2004.¹ This does not include property taxes collected for debt payments. Between 1995 and 2004 property tax collections increased at an annual rate of about 8.3 percent per year. If property taxes continued to increase at this rate, then local property tax collections for education would equal \$5,368.8 million in FY 2006. To put this in perspective, in FY 2004, the lottery raised \$787 million, the corporate income tax raised \$487 million, and the sales tax raised \$4,860.9 million.

In addition to these property taxes, 10 school systems (8 county systems and two independent systems) rely on a 1 percent sales tax for operating purposes.² In 2004, these 10 systems collected \$44.2 million from their sales tax. In addition, local school systems rely on miscellaneous taxes and fees, the revenue from which is small. The proposed Constitutional amendment is silent on these revenue sources, and thus, we ignore them in the analysis. However, it should be noted that if these 10 systems are allowed to use the local sales tax to supplement state funds, but no other systems are, it would be considered inequitable. If, on the other hand, the State

¹ Property tax collections were estimated by multiplying each school system's property tax base and reported millage rate (Department of Revenue) and assuming a collection rate of 98 percent.

² Note that these are not ESPLOST (Education Special Local Option Sales Tax).

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reduces its funding to these school systems by an amount equal to its sales tax revenue, it would be rational for these systems to drop the sales tax.

The cost to the State government of eliminating school property taxes will depend on how much of the school property tax the state chooses to replace. The proposed Constitutional amendment is silent on how much of the school property tax has to be replaced. Thus, the State could select any replacement level it wanted. It could, for example, choose not to replace any of the property tax revenue, in which case there would be no cost to the State government. We doubt that this is a viable option.

The State government could also replace more than the existing education property tax revenue. (For FY 2004, every \$100 increase in expenditures per student cost the State government \$149.8 million.) Despite these options, we consider 100 percent replacement of school property taxes, which would cost the State government \$4,557.4 million (in FY 2004).

The State could replace each system's property taxes, thus keeping expenditures per student in each system equal to their existing levels. However, a state school funding program that legislated such inequities would very likely be ruled unconstitutional.

An alternative would be to mandate equal per student spending in all systems. (Of course, differences across systems in per student spending would likely arise due to adjustments for the mix of students, inter-state variations in cost, etc.) For FY 2004, total state and local revenue per student was \$6,865 and ranged between school systems from \$4,971 to \$11,574 (Department of Education, Revenue Report). This alternative would increase total state and local revenue per student for many school systems, and would reduce revenue per student in other school systems. To reduce the number of systems that would have to cut expenditures, and to reduce the size of the cuts, the State could increase spending beyond the current average level.

While not consistent with the proposed Constitutional amendment, the State could consider partial elimination of school property taxes. For example, the State could consider the following options:

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- First, eliminate and completely replace property taxes on just homesteaded property. We estimate that homesteaded property is about 37 percent of the property tax digest and thus, we estimate that it would cost the State government about \$1.7 billion to replace school property taxes on homesteaded properties. This option would allow local school systems to fund supplements to the State education grant.
- Second, the State could set a minimum expenditure per student that the State government finances, and then allow systems that currently spend more than this minimum to impose a property tax sufficient to maintain their existing expenditures per student. By restricting the allowable increase in expenditures per student for these high spending systems, over time all systems could be at the same expenditure per student. If the minimum expenditure per student is set at the current average of state plus local revenue per student, this option would cost the State government \$4,557.4 million (in FY 2004). Property taxes would fall by about \$4,073.4 million. The difference of \$484.0 million is what the high spending systems spend above the current average expenditure per student. This is similar to what Michigan has done.

B. What It Might Cost to Provide an Adequate Education

The Consortium for Adequate School Funding in Georgia has filed a suit against the State of Georgia, contending that the State government is not providing an adequate education for all students. It contends that inadequate funding by the State is a major cause. A major question facing the State is, how much might the State have to increase education funding if it loses the court case? While a final decision in this case may be years away, it is prudent to consider the financial consequences if the State loses the suit. (Appendix B contains a more complete discussion of the cost and funding of an adequate education if the State does not eliminate school property taxes.) An important piece of information in such an exercise is an estimate of how much education expenditures per student will have to increase.

The State has or is about to engage a consultant to determine the level of funding necessary to achieve the State's education objectives, but the results of this study will not be available until the end of 2006. At this point, without benefit of a study, we can only speculate as to the amount that would be required.

In a letter to Governor Perdue, The Consortium for Adequate School Funding in Georgia argues that the basic program as defined in the Quality Basic Education

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(QBE) Act is under-funded by “at least \$1.2 billion in FY 2006.” About half of this amount is attributed to recent austerity reductions, direct cuts, and lack of any adjustment for inflation. The letter goes on to state “that this estimate does not represent the level of funding that would be needed to meet the State’s standards for student performance or to provide the adequate education required by the Georgia Constitution.” So, the Consortium believes that \$1.2 billion is the starting point and that the increase required in order to provide an adequate education will be greater.

Several states have conducted adequacy studies. These studies attempt to estimate the minimum resources necessary to meet the state’s education standards, given the nature of the student body and the price of resources. Because Georgia has not completed an adequacy study, we use the studies from other states to develop an estimate of the magnitude of the increase in education funding that might be required in Georgia.

Each state is different in terms of its education standards, the composition of its students, and wages and prices that have to be paid. Furthermore, the studies present different results that make it difficult to compare their findings. For example, some studies specify an average expenditure per student only for students enrolled in regular classes. Others specify an average expenditure per student for a hypothetical school that enrolls a representative group of students, including those with learning disabilities. Despite these differences, we use these studies to provide an estimate of what level of education spending in Georgia might be necessary to provide an adequate education.

For the 16 adequacy studies that provide an average expenditure per student for a representative group of students, the range in required expenditures per students is from \$6,302 to \$9,412 (Table 1), for FY 2004. Note that for some states more than one study was conducted. (We do not consider the studies for New York, which have a range of \$12,679 to \$17,647.) The mean expenditure per student for these 16 studies is \$7,600 and the median is \$7,561. We selected \$7,500 per student as the estimate of what Georgia might have to provide.

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TABLE 1. RESULTS FROM ADEQUACY STUDIES

State	Year Study Released	Required Expenditures per Student, 2004 ¹
Arkansas	2003	\$7,268
Colorado	2003	\$7,639
Indiana	2002	\$7,649
Kansas	2001	\$6,774
Kentucky	2003	\$7,159
Kentucky	2003	\$8,763
Maryland	2001	\$7,707
Missouri	2003	\$8,444
Montana	2003	\$6,473
Nebraska	2003	\$6,302
North Dakota	2003	\$6,474
Oregon	2000	\$6,628
Texas	2001	\$7,483
Washington	2003	\$8,691
Wisconsin	2002	\$9,412
Wisconsin	1998	\$8,730

¹. Adjusted for cost increases between the year of the data used in the study and 2004.

Source: *Education Week*, January 6, 2005 vol. 24, no. 17, page 39.

It is important to understand what the \$7,500 amount represents. It is the *minimum* expenditure per student averaged across a representative set of students, and thus, allows for special learning programs for the learning challenged and honors students. It does not mean there will be no variations in expenditures per student by program type and school level. The expenditures are for standard education programs and associated expenses such as administration, but do not include funding required for construction or special programs such as school nurses, nor does it include federal funding such as Title I.

If the State eliminated school property taxes and increased spending to \$7,500 per student, the cost to the State government would be \$5,734 million. This amount is comprised of the reduction in school property taxes of \$4,557 million, and the amount needed to increase the average state and local revenue for basic programs from the current (FY 2004) \$6,728 per student to \$7,500 per student, which is \$1,157 million.

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C. The Effects of Eliminating School Property Taxes

1. Magnitude of Property Taxes

The proposed Constitutional amendment would eliminate the property tax for school purposes. About 55 percent of property taxes collected in Georgia are for education purposes (Rubenstein and Sjoquist 2003). Thus, if the proposed amendment was adopted, there will be a large reduction in property taxes.

Table 2 shows property tax collections per capita and per \$1,000 of income for Georgia and its border states for 2001-02. As can be seen, Georgia is the second highest out of the six states in property tax collections per capita and the third highest in property taxes per \$1,000 of income. So, relative to our neighbors, property taxes in Georgia are high. If Georgia eliminated the school property tax, it would fall to fifth highest in terms of property tax per capita and to sixth highest in terms of property taxes per \$1,000 of income.

TABLE 2. PROPERTY TAXES PER CAPITA AND PER \$1,000 OF INCOME

State	-----Property Taxes-----	
	Per Capita (Rank)	Per \$1,000 of Income (Rank)
Alabama	\$328.99 (6)	\$12.88 (6)
Florida	\$943.82 (1)	\$31.72 (1)
Georgia	\$777.16 (2)	\$26.97 (3)
North Carolina	\$654.75 (4)	\$23.49 (4)
South Carolina	\$754.49 (3)	\$29.59 (2)
Tennessee	\$596.38 (5)	\$21.60 (5)

Source: *Government Finances 2001-02*, U.S. Bureau of the Census.

Nationally, Georgia's property taxes are relatively low; Georgia ranks 35th in property taxes per capita and per \$1,000 of income. If Georgia eliminated school property taxes, Georgia would be 48th in terms of property taxes per capita and 50th in terms of property taxes per \$1,000 of income.

We calculated the average of the total property tax rates on residential property in each of Georgia's border counties and the counties that border Georgia, adjusting for inter-state differences in the assessment ratios. Border counties in Florida and South Carolina have higher property tax rates than the Georgia border counties, while border counties in Alabama have lower property tax rates on residential property than the Georgia border counties. Border counties in Tennessee

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and North Carolina have residential property tax rates that are similar to those in Georgia's border counties.

2. Tax Burden

About 57 percent of property taxes in Georgia are paid by non-residential property owners (including apartment owners) (Georgia Department of Revenue 2004). This is not the same as who bears the burden of the tax. For example, the property tax on retail property may be passed on to consumers in the form of higher prices. (See Section E for a discussion of who bears the tax burden.)

Property taxes are deductible for federal income tax purposes while sales taxes will not be deductible after 2006. We estimate that the shift from a property tax to a sales tax will result in an increase of \$345 million in federal income taxes paid by Georgians. Also, homeowners will pay an estimated additional \$40 million in state income tax because of the reduced deductions.

Some school districts provide an exemption for senior citizens from the school portion of the property tax. This group of property owners would not benefit from the reduction in school property taxes. Depending on the tax used to replace the school property tax, the elderly may see an increase in their taxes; for example, they would have to pay the sales tax.

3. Homeowners Tax Relief Grants

The State currently funds homestead exemptions through the Homeowners Tax Relief Grant. Eliminating school property taxes would reduce the State's expense for these grants. We estimate the reduction in cost (FY 2005) would be about \$238 million.

4. Economic Incentives

A substantial reduction in property taxes creates an economic incentive to invest. A reduction in property taxes increases the net returns to investment in physical capital and reduces the cost of housing, thereby increasing investment in property. The more capital intensive the business, the greater will be the incentive

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effect of the property tax reduction. In addition, the increase in investment will be larger in those counties that experience a larger reduction in the property tax rate. However, this impact could be dampened if the loss in property tax revenue is made up through increases in other taxes.

The existing research on the effect of tax incentives generally finds that the effects of tax reductions on the location of business are small (Buss 2001). And, it is important to note that the reduction in property taxes is only part of the proposed policy change. For example, there will be an increase in other taxes to offset the property tax reduction. If the taxes that are used to supplement the loss in property tax affect decisions of businesses and individuals, they could reduce or eliminate the positive effects of eliminating the property tax. The effect on the quality of education will also affect how the state's economy responds to the policy.

There are some studies that have explicitly considered the effect of property tax changes on economic development. Ladd and Bradbury (1988) find that a 10 percent reduction in property tax rates will lead to about a 1.5 percent increase in the value of the property tax base, either from property price increases or from new development. Thus, given that under the proposed Constitutional amendment property taxes will be cut by approximately 55 percent, Ladd and Bradbury's result suggests that the value of the property tax base will increase by 8.25 percent. Finney (1994) finds that a one percentage point change in the property tax rate will increase the probability of a manufacturing plant locating in the area by 0.14 percent. Given the proposed reduction in the property tax rate of 55 percent, which implies a 0.66 percentage point reduction from the average property tax rate of 1.2 percent, the effect on the probability of a plant locating here would be increased by 0.092 percent.

The property tax on non-residential property is essentially an addition to the cost of capital that a firm must pay. A reasonable assumption, based on the literature, of the effect of a one percent decrease in the cost of capital is a 0.3 percent increase in the stock of capital. The expected reduction in the property tax rate is 0.66 percentage points. Assuming a gross of tax cost of capital of 20 percent, the reduction in the property tax implies a 3.3 percent reduction in the cost of capital. Applying the elasticity of 0.3, it follows that the stock of capital would increase by

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about one percent. Given a constant capital-labor ratio of 2.3, it follows that employment would increase by an estimated 34,045 jobs.

There is a substantial literature that finds that house values in school attendance zones vary directly with the quality of the schools, controlling for other factors that affect house values (Weimer and Wolkoff 2001). The reason for this, of course, is that the number of houses within a school attendance zone is limited, but there is a higher demand to be located in a good school zone or school system than in other zones or districts. Thus, households pay a premium to be able to send their children to better public schools. To the extent that changes in available funds across school systems will lead to changes in the quality of education across school systems, we expect that property values will change. In school systems that are able to improve their quality of education, perhaps because of an increase in revenue, increases in the demand to attend those schools will lead to increases in property values. And vice versa for school systems that experience a decrease in quality.

5. Changes to the Property Tax

Part of the motivation for eliminating school property taxes is that property taxes are unpopular among voters, particularly homeowners. There are changes that could be made to the property tax that might reduce voter dislike of the property tax. The first is to increase the homestead exemption, something that the State has already been doing.

A second change is to reduce the assessment ratio for homesteaded or residential property (which includes rental property) from the current 40 percent to, say, 20 percent for school funding purposes. For any millage rate, this would reduce taxes on residential property by about half, but if revenues were held constant, this change would shift the burden of property taxes to non-residential property. Residential property is about 43 percent of the property tax digest. Reducing the assessment ratio on residential property to 20 percent while increasing the millage rate to keep revenues constant would cut property taxes on residential property by 37 percent and increase property taxes on non-residential property by 28 percent.

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Another option would be to replace school property taxes on residential property with a local school system income tax tied directly to the state income tax.³ The rate could be uniform across the state, or the rate could be set separately by each school system, perhaps with some State imposed restriction on the rate. For example, the State could require an income tax rate that would generate at least the same amount (or some set percentage) of revenue that would have been collected from residential property given the property tax rate set by the school system. Such a tax system exists in Ohio and Pennsylvania.

There are administrative issues associated with the use of an income tax that need to be recognized. First, if income tax rates differed by school system, determining tax withholding would be more complex.⁴ Second, the school system would be required to set the rate well in advance of when it will receive the revenue, and has to do it with limited knowledge of the income tax base. Currently, the property tax rate is set after the tax assessor determines the value of the property tax base.

Revenue would be distributed to school systems throughout the year based on the amount of tax withholdings. After the income tax returns are filed, the revenue would be distributed to the school systems. Thus, if the school system had to set its income tax rate in the fall, say 2004, then it would receive income tax revenue throughout 2005 and for a good part of 2006. Funding through the use of an income tax will generate greater revenue uncertainty for the school system. This means that prudent financial management will require a larger reserve.

D. Options for Raising Revenue

There are several revenue options available to the State for increasing the State funding of schools. While the proposed constitutional amendment refers to a sales tax, the amendment does not mandate or limit revenue options to the sales tax. Thus, this section focuses on alternatives revenue sources, including the sales, and their likely impacts on tax burdens and economic activity.

³ See Sjoquist (2003) for a more complete discussion of this idea.

⁴ Ohio uses a similar local income tax set up.

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1. Option 1. Sales Tax

The proposed Constitutional amendment provides for a sales tax of up to 3, which we refer to as the Education Sales Tax. The revenue from the Education Sales Tax will be earmarked for K-12 education. The amendment eliminates all current exemptions from the sales tax, but allows the General Assembly to vote to retain any of the exemptions (see Appendix C for a complete list of the current exemptions). In this section we first provide an estimate of the sales tax rate required to replace 100 percent of the current school property tax under alternative assumptions regarding which sales tax exemptions are retained. We then discuss expansion of the sales tax base to include services. Finally, we discuss some of the economic effects of increasing the sales tax.

Required Education Sales Tax Rate

The sales tax rate necessary to replace all of the school property tax collections will depend on which of the current exemptions are retained. We calculated the tax rates under three assumptions: all of the exemptions are retained; only the food for home consumption is eliminated, and; most exemptions are eliminated. Regarding the third assumption, we assumed that the following exemptions would not be eliminated:

- Rental of rooms and lodging for more than 90 days;
- Sales to governments;
- Casual sales of personal property;
- Credit allowance for trade-ins on property;
- Sales of raw materials used in manufacturing.

We do not believe that these exemptions will be eliminated.

We first estimated the tax rates assuming no behavioral response to the change in the tax rate. However, we expect that in response to the tax rate increase households will reduce their purchases of taxable goods, either by shifting some of their purchases to non-taxed goods, shopping in border states that have lower tax rates, or in the case of non-residents, not shopping as much in Georgia. However, there is not much information on the magnitude of the effect of the sales tax rate on

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sales tax revenue. However, we found one study that estimated that a doubling of the sales tax rate would increase sales tax revenue by 193 percent, rather than the 200 percent which is what would be expected with no behavioral response. This seems to be a plausible estimate of the possible response.

Table 3 presents the estimates of sales tax rates necessary to replace school property tax rates. If most of the current sales tax exemptions are eliminated, then we estimate that a sales tax rate of 3 percent will be sufficient to replace the current school property tax collections of \$4,557.4 million. However, if the current exemptions are retained, it will require more than a 3 percent sales tax to replace all of the school property tax.

TABLE 3. UPDATED ESTIMATED SALES TAX RATE REQUIRED TO REPLACE SCHOOL AD VALOREM TAXES (FY 2004)

Behavioral Assumption	Sales Tax (All Current Exemptions Apply)---Required Sales Tax		Sales Tax (No Food Exemption)-----Required Sales Tax		Sales Tax (Eliminating Most Exemptions)---Required Sales Tax	
	Base	Rate	Base	Rate	Base	Rate
No Behavioral Response	\$121,522.6 million	3.75%	\$143,546.7 million	3.17%	\$219,044.7 million	2.08%
Behavioral Response	\$117,306.8 million	3.93%	\$139,726.7 million	3.26%	\$216,097.9 million	2.12%

If the increase in the sales tax rate leads to a behavioral response, not only will the sales tax rate required to replace school property tax collections be higher, but the revenue from the existing sales tax will also fall. We estimate that the reduction in General Fund sales tax revenue from adding an Education Sales Tax will be about 4 percent, or about \$206 million (FY 2004).

Sales Tax Exemptions

The ability to replace the current school property tax collections with a sales tax rate of less than 3 percent depends on the elimination of current exemptions. There are currently about 100 exemptions to Georgia's state sales tax (see Appendix C for a description of each exemption). Table 4 provides a list of exemptions that are estimated to reduce State government revenue, assuming a 4 percent sales tax rate, by

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TABLE 4. EXEMPTION DESCRIPTION

	Value of Exemption, 2004 (in million \$)
Sale of raw materials used in manufacturing	\$ 2,762
Credit allowances for trade-ins on property	\$ 862
Sale of food for home consumption	\$ 881
Sale of property manufactured for export	\$ 631
Transportation charges for interstate and intrastate commerce	\$ 575
Property furnished by governments to contractors for government work	\$ 411
Charges for rooms and lodging, more than 90 days	\$ 347
Sale of prescription drugs and durable medical devices	\$ 227
Personal property brought into Georgia	\$ 214
Sales to non-profit hospitals and nursing homes	\$ 210
Sale of lottery tickets	\$ 117
Sale of machinery used in manufacturing	\$ 85
Sales to hospitals	\$ 55
Sales to the University System of Georgia	\$ 54
Sale of water through water lines	\$ 46
Sale of raw materials used in farming and ranching	\$ 34
Sales to private elementary and secondary schools	\$ 26
Exemption for Replacement Parts for Machinery	\$ 20
Sale of machinery used in farming and ranching	\$ 11
Sale of machinery used to reduce pollution	\$ 10
Total	\$7,578

at least \$10 million (in 2004). (Sales to federal and local governments reduce revenue by more than \$10 million but are not included in the Table 4.) The remaining sales tax exemptions account for a loss of state revenue of about \$80 million.

We believe there is much uncertainty as to whether the General Assembly will eliminate most of these exemptions. First, a substantial portion of the exemptions, in terms of revenue impact, are associated with manufacturing and agriculture and are part of the State's economic development efforts. Second, the current exemptions were adopted as the result of political decisions, and it should be expected that there will be lobbying efforts made to apply the existing exemptions to the proposed Education Sales Tax.

Having exemptions apply only to part of the total sales tax rate creates administrative complexities. Vendors will have to determine whether an item is taxed at the state level and if so, whether it is taxed at a rate of 4 percent or 7 percent.

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The vendor will further have to determine whether it is taxed at the local level. Georgia has joined the Streamlined Sales Tax Project (SSTP), which is an effort to bring greater uniformity to sales taxes across the country. The SSTP calls for a uniform sales tax base within each state. Allowing an exemption for the state 4 percent sales tax but not for the Education Sales Tax would compromise Georgia's potential participation in the SSTP effort.

Expanding the Base to Services

An alternative option for increasing sales tax revenue is to expand the existing sales tax base by including more services. Currently, every state that has a sales tax has some services that are subject to the sales tax; however, the number and types of services that are taxed vary substantially by state. In a survey conducted by the Federation of Tax Administrators, Georgia was found to tax 36 of the 168 services that are taxed in at least one state. Both the state average and median number of services taxed is 55.

Table 5 provides, by service categories, the number of services taxed by Georgia and its border states. Like its border states, Georgia taxes services in the utilities, personal services, and admission and amusement categories. Florida and Tennessee, both of which tax substantially more services than the other states that border Georgia, also tax several types of repair, automotive and storage services that Georgia, Alabama, North Carolina, and South Carolina do not. These services in particular may represent areas in which Georgia's sales tax base could be expanded and remain relatively competitive with surrounding states.

Table 6 provides estimates of the potential revenue from including various services in the sales tax base, assuming a 4 percent sales tax rate.⁵ The largest increase in revenue would come from taxing services in the Healthcare and Social Assistance category.

⁵ Management Services were not included because it had not been published at the time of the writing of this report.

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TABLE 5. TAXED SERVICES BY MAJOR SERVICE CATEGORIES (2004)

Services Categories	GA	AL	FL	NC	SC	TN
Agricultural Services	0	0	0	0	0	1
Industrial and Mining Services	0	0	0	0	0	0
Construction	0	0	0	0	0	0
Utilities	10	12	7	10	4	11
Transportation	3	0	1	0	0	1
Storage	0	0	6	0	0	1
F.I.R.E.	0	0	0	0	0	0
Personal Services	4	2	4	5	6	10
Business Services	5	6	8	5	6	7
Computer Services	2	3	0	0	4	3
Automotive Services	0	0	4	0	0	5
Admissions and Amusements	8	10	14	8	10	12
Professional Services	0	0	0	0	0	0
Leases	3	2	2	1	2	2
Fabrication, Repair and Installation	1	1	16	1	1	13
Miscellaneous	0	1	0	0	1	1
Total Taxed Services	36	37	62	30	34	67

Source: Federation of Tax Administrators. Total number of services taxed at least in one state is 168.

Including additional services in the sales tax base slows the erosion of the sales tax base due to the rising consumption of services in the state. Over the 1990s, the growth in the consumption of services in the U.S. and Georgia was substantial. In the U.S., the real value of service transactions between 1992 and 1997 grew by 37.6 percent, while in Georgia service transactions grew by 50.0 percent.⁶

⁶ Because industry classifications changed from SIC to NAICS between 1997 and 2002, industry-level data are not directly comparable between 1997 and 2002.

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TABLE 6. ESTIMATES OF SALES TAX REVENUES FROM CURRENTLY UNTAXED SERVICES

2002 NAICS Code	Meaning of 2002 NAICS Code	Sales Tax Revenue Potential (2004)
Professional, Scientific, and Technical Services		
5411	Legal services	\$195.5
5412	Accounting, tax preparation, bookkeeping, & payroll services	\$104.3
5413	Architectural, engineering, & related services	\$174.5
5414	Specialized design services	\$ 25.3
5416	Management, scientific, & technical consulting services	\$211.4
5417	Scientific research & development services	\$ 35.4
5418	Advertising & related services	\$ 68.7
5419	Other professional, scientific, & technical services	\$ 46.1
	Subtotal	\$861.3
Real Estate and Rental and Leasing		
5311	Lessors of real estate	\$115.7
5312	Offices of real estate agents & brokers	\$ 83.9
5313	Activities related to real estate	\$ 71.8
5331	Lessors of nonfinancial intangible assets (exc copyrighted works)	\$ 36.3
	Subtotal	\$307.8
Administrative and Support and Waste Management and Remediation Services		
5611	Office administrative services	\$ 31.2
5612	Facilities support services	\$ 15.6
5613	Employment services	\$211.0
5615	Travel arrangement & reservation services	\$ 49.3
5616	Investigation & security services	\$ 43.7
5617	Services to buildings & dwellings	\$104.8
5621	Waste collection	\$ 29.8
5622	Waste treatment & disposal	\$ 7.6
5629	Remediation & other waste management services	\$ 10.0
	Subtotal	\$503.1
Educational Services		
6114	Business schools & computer & management training	\$ 10.4
6115	Technical & trade schools	\$ 11.2
6116	Other schools & instruction	\$ 7.8
6117	Educational support services	\$ 3.0
	Subtotal	\$32.5
Health Care and Social Assistance		
6211	Offices of physicians	\$317.8
6212	Offices of dentists	\$ 86.3
6213	Offices of other health practitioners	\$ 37.2
6214	Outpatient care centers	\$ 74.3
6215	Medical & diagnostic laboratories	\$ 31.7
6216	Home health care services	\$ 28.6
6219	Other ambulatory health care services	\$ 16.9
6221	General medical & surgical hospitals	\$530.8

Table 6 continues next page...

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**TABLE 6 (CONTINUED). ESTIMATES OF SALES TAX REVENUES FROM CURRENTLY
UNTAXED SERVICES**

2002 NAICS code	Meaning of 2002 NAICS code	Sales Tax Revenue Potential (2004)
Health Care and Social Assistance (cont.)		
6222	Psychiatric & substance abuse hospitals	\$ 19.5
6223	Specialty (except psychiatric & substance abuse) hospitals	\$ 22.7
6231	Nursing care facilities	\$ 67.6
6232	Residential mental retardation/health & substance abuse facility	\$ 6.0
6233	Community care facilities for the elderly	\$ 18.7
6239	Other residential care facilities	\$ 5.4
6241	Individual & family services	\$ 27.3
6242	Community food & housing/emergency & other relief services	\$ 34.2
6243	Vocational rehabilitation services	\$ 8.1
6244	Child day care services	\$ 33.8
	Subtotal	\$1,366.9
Other Services (except Public Administration)		
8111	Automotive repair & maintenance	\$ 86.1
8112	Electronic & precision equipment repair & maintenance	\$ 16.0
8113	Com & industrial mach & equip (exc auto/elect) repair & maint	\$ 22.2
8114	Personal & household goods repair & maintenance	\$ 8.2
8121	Personal care services	\$ 22.1
8132	Grantmaking & giving services	\$ 45.5
8133	Social advocacy organizations	\$ 7.2
8134	Civic & social organizations	\$ 15.6
8139	Business/professional/labor/political & similar organizations	\$ 32.8
	Subtotal	\$255.6
	Total	\$3,327.1

Source: U.S. Bureau of the Census with Calculations made by the Fiscal Research Center.

Magnitude of Sales Taxes and Equity

Currently, Georgia ranks 11th highest among the 50 states in terms of state and local sales taxes per capita and 17th in terms of state and local sales taxes per \$1,000 of income. If sales taxes increased by \$4,557.4 million, Georgia would rank second highest in terms of state and local sales taxes per capita and per \$1,000 of income.

It is estimated that about 36 percent of the sales tax is paid by businesses (Ring 1999); this is not the same as who bears the burden of the tax. For example,

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businesses may pass the sales tax they paid on their purchases onto consumers in the form of higher prices.

Exempting certain products from the sales tax will benefit consumers who are more likely to purchase the exempt product. Thus, the elimination of targeted sales tax exemptions would improve tax equity among different types of consumers and producers in the state.

The sales tax is a regressive tax, i.e., low-income households pay a larger share of their income in sales taxes than do high-income households. But including additional services in the sales tax base would reduce the regressive nature of the sales tax (Fox and Murray 1988). On the other hand, removing food at home and health related exemptions will increase the regressivity of the sales tax.

Economic Incentives

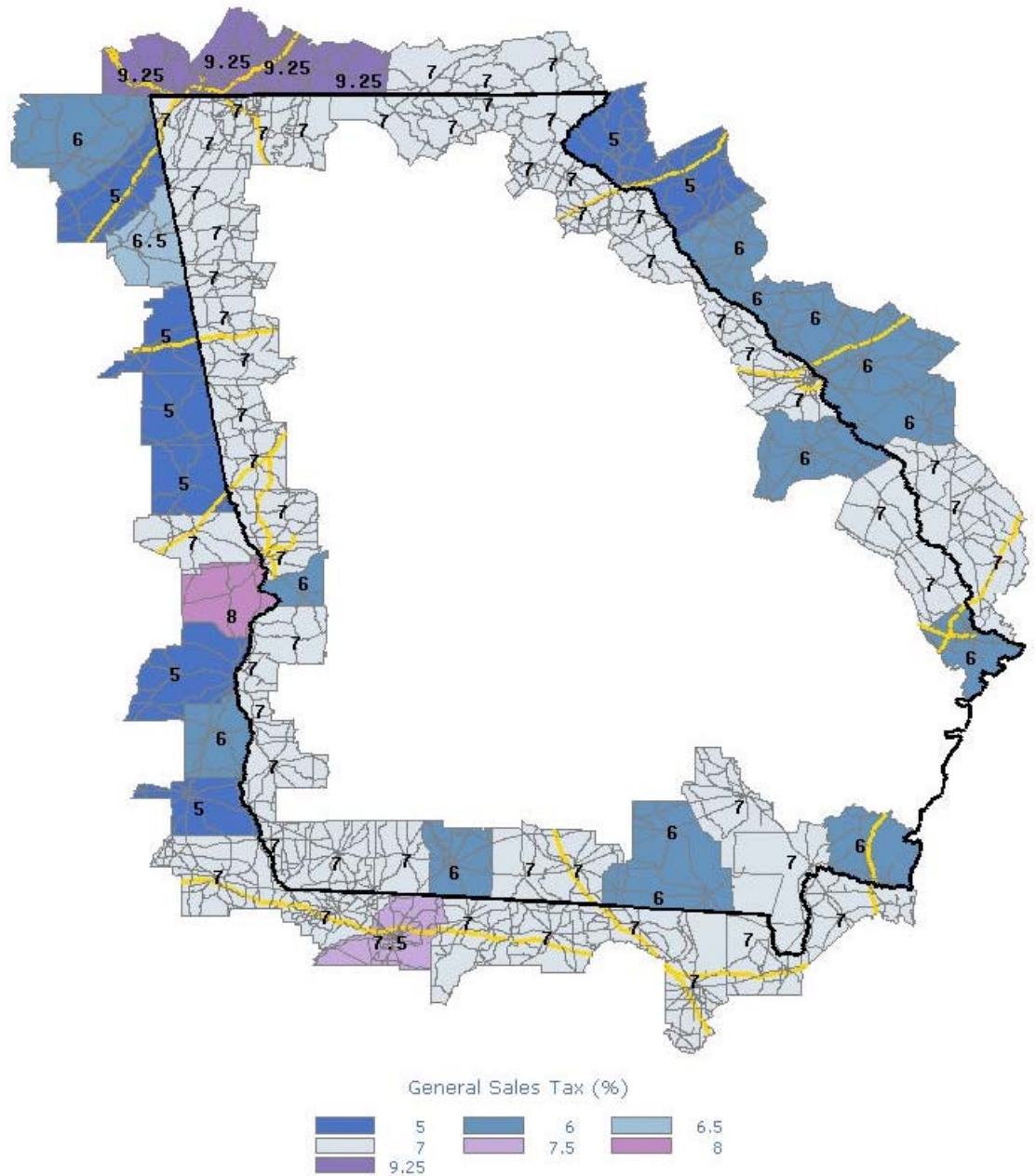
One potential effect of increasing the state sales tax rate is cross-border shopping. A sales tax differential along the borders of a state creates the incentive for people who live near the border to shop in jurisdictions with lower sales tax rates, and many studies that have found such an effect. These studies generally find that a one percent higher sales tax rate is associated with per capita sales that are between 1 to 6 percent lower. For example, Walsh and Jones (1988) explored the effect on grocery purchases from a 3 percentage point phased-in reduction of West Virginia's sales tax rate. They find that grocery sales along the West Virginia border increased by about 5.9 percent for each percentage point reduction in the sales tax rate.

Map 1 shows the current state plus local sales tax rate for each county in all counties that form the Georgia border. The following can be seen:

- The sales tax rate is 7 percent in 39 Georgia's border counties and 6 percent in the other 7 counties.
- All of Tennessee's border counties have a combined state and local sales tax rate of 9.5 percent compared to a 7 percent rate in all of Georgia's counties that border Tennessee.
- The sales tax rates are the same in North Carolina and Georgia border counties.

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MAP 1. CURRENT SALES TAX RATES AND ROAD NETWORK IN BORDER COUNTIES



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- With two exceptions, all of South Carolina's border counties have a smaller sales tax rate than do Georgia's border counties. In one exception the rates are the same, 6 percent, and in one case Georgia's rate is 6 compared to 7 percent in the South Carolina county.
- All of the border counties in Florida are either the same or higher than the county rates in Georgia. Four of the 7 Georgia border counties with a 6 percent rate are on the Florida border.
- With two exceptions, the sales tax rates for Alabama counties are lower than the rates in Georgia's border counties. In one case the rate in Alabama equals the rate in Georgia, while in the other case the rate in Alabama exceeds the rate in Georgia.

Map 1 indicates that currently there may be an incentive for citizens of Florida and Tennessee to travel across the state line into Georgia to shop for taxable goods and services. The reverse may be true for counties along the Alabama and South Carolina border. The extent to which an increase in Georgia's sales tax rate will effect border shopping depends on the ease of shopping in another state, the size of the population along the border, and the average income in the county. With the exception of those parts of the border formed by a river, i.e., the border with southern Alabama and with South Carolina, cross border access between Georgia counties and those in other states is generally good.

If a 3 percent Education Sales Tax is imposed, the state plus local sales tax rate for all of Georgia's border counties would exceed the sales tax rate in its bordering counties. The differences in tax rates would range from 0.75 percent to 5 percent.

Because the new Education Sales Tax would not exempt food for home consumption, Florida and North Carolina would have substantially lower sales tax rates on food than Georgia does. Florida exempts food sales for home consumption from both the state and local sales tax and in North Carolina it is taxed at only the local level (2.5 percent). Along the borders of South Carolina, Alabama and Tennessee, the rate differentials are smaller in comparison, and are favorable to Georgia in areas of high population. However, Georgia will likely lose current cross-

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border food shopping along all bordering states, but particularly to Florida and North Carolina.

The increase in sales tax rates provides an incentive to purchase goods and services that are not taxed. Consumers will also try to find ways of avoiding the sales tax. For example, consumers may increase internet purchases. As noted above we found one study that estimated that a doubling of the sales tax rate would increase tax revenues by 193 percent. This implies that a doubling of the sales tax rate would reduce the sales tax base by 3.5 percent.

Growth in the Sales Tax Revenue

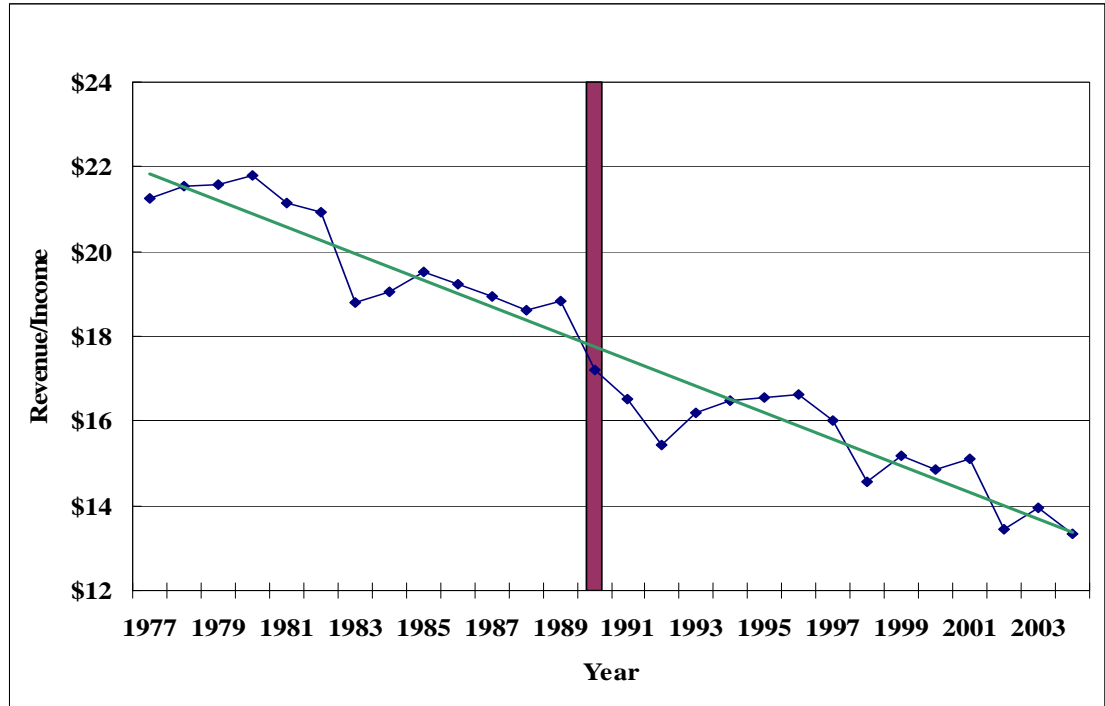
Figure 1 shows that over the past quarter of a century, Georgia's state sales tax revenue as a share of the state economy, adjusted for the sales tax rate increase, has declined. (The vertical line in Figure 1 represents the year the sales tax rate increased from 3 percent to 4 percent.) Sales tax revenue declined from \$21.8 per \$1,000 of income in 1980 to \$13.3 in 2004, adjusting for the increase in the sales tax rate, or by 39 percent.

There are two main reasons for this decline. First, as noted above, consumption patterns have changed. As income increases, consumers spend a larger share of their income on services, which are generally not taxed in Georgia, and a small share on goods, which are taxed. Second, the sales tax base has shrunk as the number of sales tax exemptions has increased.

We also compared local revenue for education (Department of Education, Revenue Reports) to state sales tax revenue (Governor's Budget Report) over the period 1996 to 2004. (We did not have local education revenue data for earlier years.) About 98 percent of local education revenue is property tax revenue and does not include ESPLOST revenue. In 1996, a sales tax rate of 2.6 percent applied to the existing state sales tax base (including food for home consumption) would have raised enough revenue to replace locally raised school system revenue. The sales tax rate that is required to replace local education revenue gradually increased, so that by 2004 the required rate was 3.3 percent, assuming food for home consumption is taxed. This is a 27 percent increase in the sales tax rate required 8 years earlier.

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FIGURE 1. SALES TAX PER \$1,000 OF PERSONAL INCOME (ADJUSTED FOR TAX RATE INCREASE)



The implication of replacing education property taxes with an Education Sales Tax is that either spending on education will not grow as fast as it did in the 1990s, or that the State government will have to devote an increasing share of its other revenue to K-12 education, or that the sales tax rate will have to be continuously increased.

2. Option 2. Divert Annual Increase

One source of revenue for increasing education funding beyond its current level is to rely on part of the expected annual increase in revenues. Under this option, a certain percentage of the annual increase would be diverted to education. This would be beyond the amount of the annual increase that is currently used to fund increases in education spending. Diverting the increase to education means that other programs will get less funding, but it would mean that taxes would not have to be increased.

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Suppose the State government decided to increase state funding of education by \$1,334 per student, which in FY 2004 would amount to \$2 billion, and to do so over time by diverting revenue from the annual increase in revenues. The amount necessary to maintain this increase will grow over time because of inflation and because of the increase in enrollment. We assume that this increase will be 5 percent per year.

The average annual increase in total state revenue over the past 15 years has been about 5.5 percent; the range is from -1.2 percent to 12.6 percent. (In dollar terms, the average increase has been about \$598 million per year.)

If 10 percent of the annual increase in revenue is diverted to education, over and above the normal increase in education spending, it will take until FY 2065 to achieve the desired increase of \$1,334 per student, adjusted for inflation. If 20 percent is diverted, it will take until 2023 to achieve the desired increase.

We have calculated how long it will take to achieve an increase in education spending by \$1 billion and by \$2 billion for different levels of diversion. The results are shown in Table 7. Certainly, the more that is diverted, the less time it takes to achieve the desired increase in education spending.

TABLE 7. TIME TO ACHIEVE INCREASED EDUCATION FUNDING USING ANNUAL REVENUE INCREASE

Percent Diverted Each Year	-----Year Increase is Achieved-----	
	\$1 billion	\$2 billion
10%	2023	2065
20%	2013	2023
33.3%	2010	2015
50%	2009	2012

The major issue with this option is that spending on other programs cannot increase as much. A 5.5 percent increase in FY 2005 revenue would be \$903 million. So a 10 percent diversion would be \$90.3 million, while a diversion of 1/3rd would be \$301 million.

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3. Option 3. Income Tax

The income tax in Georgia is the single largest revenue source for the state. In FY2004, the income tax raised 51.3 percent of all state tax revenue, and the next largest source is the state general sales tax at 34.6. Georgia's income tax per capita is \$722.84, somewhat higher than the U.S. average of per capita income tax revenue (including those states without an income tax) of \$636.00 in 2003 (U.S. Census Bureau, <http://www.census.gov/govs/www/state03.html>).

Nationally, 41 states use a broad-based income tax as part of their revenue structure. In addition, two states, Tennessee and New Hampshire impose limited income taxes. One of Georgia's close neighbors, Florida, has no individual income tax.⁷ Georgia's individual income tax structure is relatively simple. The structure is a progressive marginal tax rate with rates ranging from one to six percent. The top marginal tax rates begin at relatively low levels of Georgia taxable income, so many tax filers are subject to the highest marginal tax rate. The schedule of income tax rates is found in Table 8.

TABLE 8. INDIVIDUAL INCOME TAX BRACKETS AND RATES BY FILING STATUS

<u>Singles</u>		<u>Married Filing Separate</u>		<u>Joint, Head of Household</u>	
Rate	Taxable Income	Rate	Taxable Income	Rate	Taxable Income
1%	< \$750	1%	< \$500	1%	< \$1,000
2%	750-2,250	2%	500-1,500	2%	1,000-3,000
3%	2,250-3,750	3%	1,500-2,500	3%	3,000-5,000
4%	3,750-5,250	4%	2,500-3,500	4%	5,000-7,000
5%	5,250-7,000	5%	3,500-5,000	5%	7,000-10,000
6%	>7,000	6%	>5,000	6%	>10,000

Georgia's income tax is "coupled" to the federal income tax system in that it uses federal adjusted gross income as the tax base. Most states use this form of coupling, which may reduce some of the taxpayer burden of compliance. However, this coupling makes state individual income tax revenues susceptible to changes in the federal income tax law. For example, when the recent dividend treatment was

⁷ Other states without an individual income tax include: Washington, Nevada, South Dakota, Texas, Alaska, and Wyoming.

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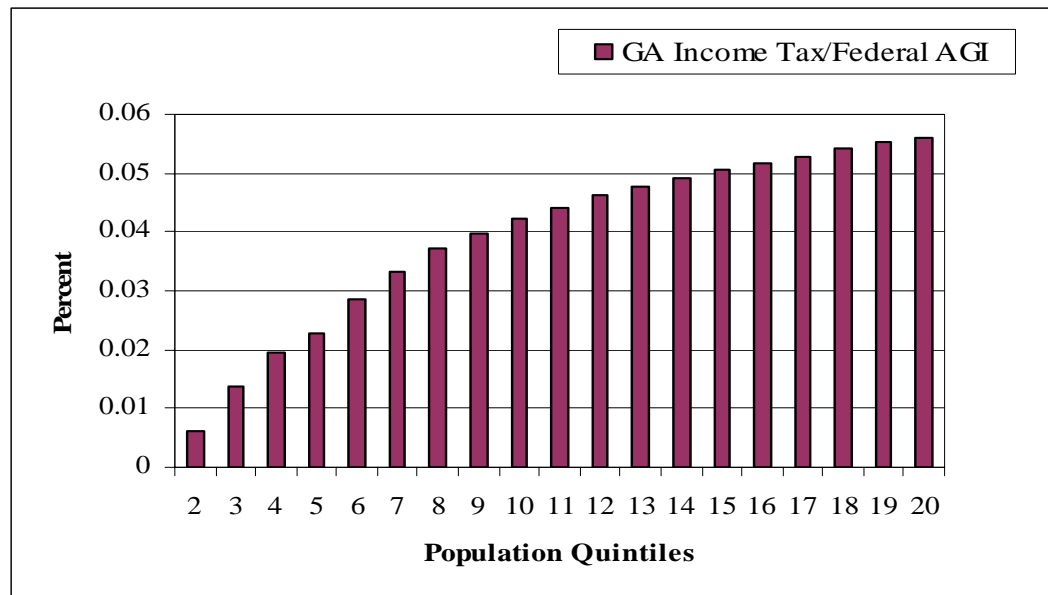
revised at the federal level, Georgia (and other states that couple) witnessed a revenue loss due to the income tax base coupling.

Georgia does impose its own personal exemption amounts. For tax filers, the personal exemption is valued at \$2,700 and for dependents, \$3,000. Georgia's standard deduction amounts are \$3,000 for joint filers and \$2,300 for single filers. The elderly and blind receive an additional \$1,300 in standard deduction amount. Tax filers who use itemized deductions at the federal level must also itemize for their Georgia income tax returns. In 2003, 38 percent of Georgians filing federal income tax returns itemized their deductions (Internal Revenue Service, *Statistics of Income*, 2005). Georgia exempts a portion of income of retirees, defined as those 62 and older. The exemption also applies to those who are totally and permanently disabled. In FY2005, the level of this exemption was \$15,000 (up to \$4,000 of earned income may be included in the \$15,000 exemption). The exemption will be raised to \$25,000 for 2006, \$30,000 for 2007, and \$35,000 for 2008. Finally, the law allows a number of credits ranging from a low income credit (for filers with federal adjusted gross income of less than \$20,000) to credit for tax paid to another state and a low-emissions vehicle credit.

The net effect of Georgia's income tax structure is a progressive tax system that reaches individuals at relatively low levels of income. Figure 2 presents the distribution of the income tax, measured as Georgia income tax liability divided by federal adjusted gross income, with income ranging from lowest federal adjusted gross income to highest federal adjusted gross income. As can be seen in the figure, as income increases, the tax burden increases and rapidly approaches 6 percent—the top marginal tax rate.

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FIGURE 2. GEORGIA INCOME TAX AS A PERCENT OF FEDERAL AGI



Issues of the Income Tax

As noted, the income tax in Georgia is relatively simple. The overall tax burden, measured as income tax per capita or income tax relative to personal income, is slightly higher than the U.S. average. Georgia's income tax structure is most different from other states in two ways. First, the income tax reaches relatively low income individuals. Of the states that impose a broad-based income tax, 23 states offer a higher threshold of taxation, measured as the level of standard deduction. When added to the personal exemption amount (Georgia's personal exemption is somewhat more generous relative to other states than its standard deduction amounts), Georgia reaches a taxpayer threshold just slightly below that of the other broad-based tax states.

Georgia's exemption for the retirees is one of the most generous in the country. Georgia, like many other states, exempts social security income from state income taxation as well as general pension, capital and a portion of earned income. When Georgia phases into the \$35,000 exclusion, the level of the exclusion will be second only to Michigan (if no other states make changes before 2008). Georgia's

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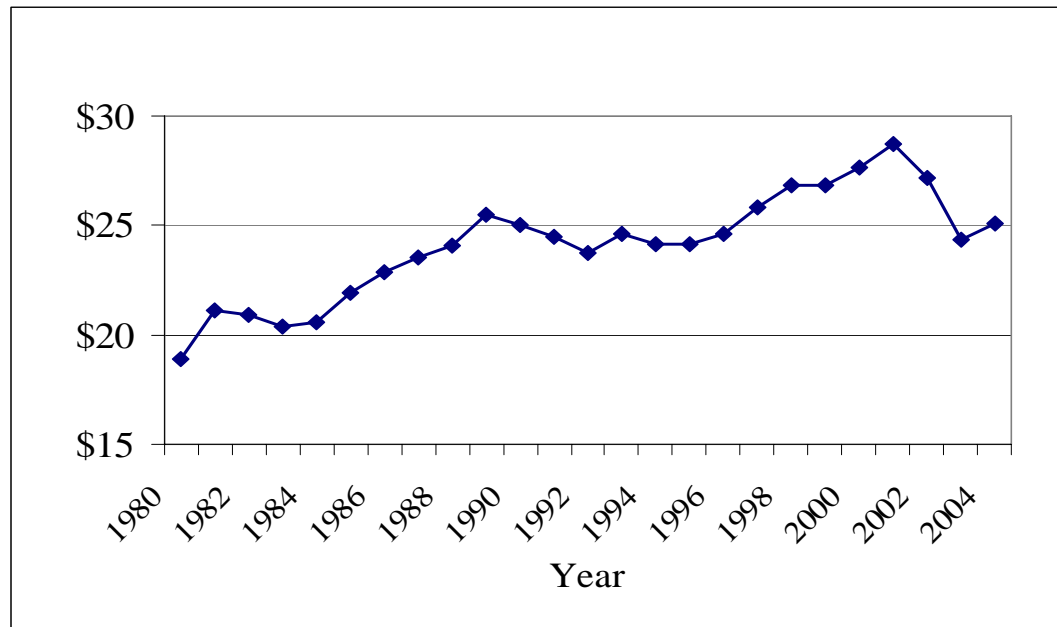
tax credits are not out of line with what is offered in other states—in fact, they are not large revenue losers according to data from the Georgia Department of Revenue.

The value of the personal exemptions, standard deductions, and retiree income exclusions can be thought of as revenue foregone by the state, or what is called a “tax expenditure.” The tax expenditures associated with the personal exemption and standard deduction are relatively large—about 17 percent and 15 percent of total income tax revenue, respectively. The tax expenditure for the elderly exemption will reach about 1.5 percent of income tax revenue in 2006.

Over the last five years, the growth of Georgia’s income tax revenue has demonstrated that it is susceptible to economic upturns and downturns. In good times, as the economy grows, income tax revenues grow, as the economy turns down, so too do income tax revenues. Figure 3 presents the relationship between income tax revenue and personal income. In the most recent recession, we notice a dip in income tax revenue as a share of personal income. This is due to a loss in employment, particularly to losses in employment at the high income end, and losses in capital income. Over time, the natural growth in income tax revenues as the economy grows has slowed down (this is known as the tax elasticity). This is due in part to the relative flat structure of the income tax (most filers are at the top tax bracket of 6 percent and can’t go higher), but also due to the sensitivity of capital income and the increased ability to shelter capital income. The reduced elasticity of the income tax could be enhanced by increasing the top bracket. We turn to this and other structural issues that may serve to supplement the revenue needs for school funding.

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FIGURE 3. INCOME TAX REVENUE PER \$1,000 OF PERSONAL INCOME



Income Tax Revenue Enhancements

Georgia has some room to expand its individual income tax to make up revenue needed to support an expanded state role in school financing. The overall progressivity of the system suggests that at the low income end, there is not too much room for reducing the threshold and still remain in line with neighboring states. The tax expenditures presented above suggest that there is money in reducing personal exemptions and standard deductions, but the impact of those changes would be to increase the tax burden for all individuals—high and low income. The level of elderly exemption, while large relative to other states, does not yield sufficient revenue to supplement state school funding at this point in time. The \$100 million tax expenditure associated with the elderly exemption is a relatively small amount of the need.

Adjusting the rate structure of the income tax is one option for raising additional revenue through the income tax. There is not much evidence that the level of state income tax rates alone has an impact on migration or economic development (Wallace, 2002). There does, however, appear to be a perception that lower tax rates

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will encourage in-migration and stimulate economic development. If Georgia increased its top marginal tax rate (using the current rate brackets) from 6 percent to 7.75 percent, the resulting revenue increase would be approximately \$1.6 billion at 2005 levels. If the top rate were increased to 8 percent, the revenue yield would increase approximately \$1.8 billion at 2005 levels. Such rate increases would put Georgia's income tax structure at the higher end of rates and tax burdens for the nation.

There are numerous alternatives for raising revenue from the income tax other than to simply raise the top marginal income tax rate. For example, if the rates and brackets were adjusted to retain some of the flatness of the income tax but with higher rates as noted below (Table 9), the revenue impact would be an increase of about \$1.6 billion in 2005 (this revenue estimate assumes similar changes to the rate and bracket structure for other filing statuses). Other rates/brackets are also possible, but, again, top rates of over 8 percent would put Georgia in the higher realm of income tax rates.

TABLE 9. ILLUSTRATIVE CHANGE IN RATE AND BRACKET STRUCTURE

-----Current Law: Joint Filers-----		---Alternative Law: Joint Filers---	
Rate	Taxable Income	Rate	Taxable Income
1%	< \$1,000	1%	< \$1,000
2%	\$1,000-\$3,000	3%	\$1,000-\$2,000
3%	\$3,000-\$5,000	4%	\$2,000-\$4,000
4%	\$5,000-\$7,000	5%	\$4,000-\$6,000
5%	\$7,000-\$10,000	6%	\$6,000-\$8,000
6%	> \$10,000	7.5%	> \$8,000

4. Option 4. Georgia's Business Enterprise Tax

Alternative Forms of Business Enterprise Taxes

An alternative form of business tax to the standard corporate income tax levied at the state level is a value-added tax. At the current time, New Hampshire and Michigan are the only states to impose such a tax. In Michigan, this is the only business tax imposed. In New Hampshire, the tax is levied as a supplement to the traditional corporate income tax. The model followed here is that of the New Hampshire tax, referred to as the Business Enterprise Tax (BET).

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The base of the New Hampshire BET is similar to an income type value-added tax (VAT). In general, a VAT taxes the incremental value added to a product at each stage of the production process. It is levied on and paid by businesses but may be borne by workers or consumers depending on the business circumstances. This is a common form of national taxation throughout much of the world.⁸ It is rare at the sub-national level but not absent.⁹ For example, in addition to the 7 percent national VAT, the Canadian province of Quebec levies a 7.5 percent consumption based value-added tax.

In a traditional income style value-added tax, the base consists of the value of gross receipts minus the cost of inputs and depreciation of capital. Alternatively, the income based value-added tax can be computed as the sum of wages and other labor compensation, rent paid, interest paid, and profits.¹⁰ The New Hampshire BET comes closest to the traditional income style VAT while containing a few deviations. For instance, the New Hampshire BET base does not include rent and only includes profits distributed in the form of dividends. Profits held by the company, i.e. retained earnings, are not included in the base of the New Hampshire BET.

The New Hampshire BET has only a few exemptions from the tax, though more could be allowed. For instance, while total compensation is subject to tax, health insurance contributions made by employers are not. Other exclusions from the base include military wages, moving expenses, ministerial wages, and dividends from pensions and profit-sharing and stock bonus plans. In addition, the base is further reduced by certain filing requirements. In New Hampshire only those companies with gross receipts in excess of \$150,000 or with a BET tax base in excess of \$75,000 are required to file a BET return. It is estimated that this provision would reduce the base of the Business Activity Tax in Georgia by 2.5 percent.

⁸ All OECD countries with the exception of the United States levy a value-added tax.

⁹ Currently Brazil, Argentina, and India impose sub-national VATs.

¹⁰ Gross receipts minus the cost of goods sold represent the value added by a firm in the production process. We can achieve the same value by summing up the payments to each component in the production process for their value added, such as labor, owners of land, and capital. The remainder, profits, represents the return on investment. These may be distributed in the form of dividends or put back into the business in the form of retained earnings. Payments for annual capital consumption, i.e. depreciation, should also be included in the base but income style VAT base excludes this.

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Revenue Effect

Applying the New Hampshire BET to Georgia is a fairly straightforward task.¹¹ Using national Statistics of Income (SOI) data pared down to represent Georgia, gives a BET base of \$143 billion in 2001. In contrast, the base of the corporate income tax for 2001 was \$11.5 billion.¹² Applying a tax rate of three percent to this, it is estimated that the Georgia BET exclusive of rent and retained earnings would raise \$4.9 billion in 2006 and \$5.0 billion in 2007.¹³

Economic Effects

The addition of a business tax of the size necessary to generate enough revenue to replace the property tax for education is expected to have some behavioral effects. In particular, an additional 3 percent business tax will likely have implications for economic development.

Compared to our contiguous neighbors, Georgia's corporate income tax rate of 6 percent is in the middle of the extremes. For instance, North Carolina has a rate of 6.9 percent, while South Carolina has a rate of 5.0 percent. For pass through entities, the highest maximum individual rate is found in North Carolina and the lowest minimum rate is found in Tennessee and Florida, which do not impose a state income tax. None of these states levy an additional business tax of the form of the Business Enterprise Tax on corporations. Thus, currently our business taxes are fairly in line with our surrounding neighbors.

The addition of the BET tax will alter this balance. It is difficult to compare the rates of the existing corporate tax with the BET since the base differs between the two taxes. In general though, the economic impact of increased taxes on business activity is estimated to be small and negative. That is, economic research has found

¹¹ The estimate provided here assumes that a Georgia BET base would exclude the same items from the base as does the New Hampshire BET, such as rent, retained earnings, health care premiums, military wages, etc. The estimate also assumes that small companies would not be required to file. At this time the estimate does not allow BET liability to be offset against the state corporate income tax liability.

¹² This statistic is slightly misleading because the corporate income tax is levied only on corporations and the BET is levied on all business entities.

¹³ If both rent paid and retained earnings were included in the base, a rate of 3 percent would raise \$6.8 billion in 2006 and \$7 billion in 2007.

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that increases in business taxes have a small but negative affect on the level of business activity in an area. In addition, any loss of business activity caused by the BET would also result in lost corporate income tax revenues and other revenues to the state. This negative effect from the imposition of a new business tax, though, should be weighted against the expected positive effects of the elimination of the school property tax. The effect of taxes on business location is reviewed by Buss (2001) and by Wheeler (forthcoming) in the context of Georgia.

Properties of the BET

There are several standards by which to judge a tax. These include efficiency, equity, administrative feasibility, transparency for the taxpayer, and stability of revenue. The standard of efficiency requires that the imposition of a tax disturb economic activity as little as possible. That is, the most efficient taxes cause very little or no change in consumer spending, labor supply, or investment decisions. In this way, the imposition of an efficient tax will not cause an erosion of its tax base.

In terms of efficiency, the BET would be expected to be more efficient than the state corporate income tax or the net worth tax. This is mainly for two reasons. The first is that the tax is levied on all business forms. Therefore, there is no incentive for a company to alter its business structure in an attempt to avoid the tax. Second, because the base of taxation under the BET is so broad, the burden paid by any one firm is low. This will also reduce the incentive to avoid it.

The equity standard of taxation concerns fairness and which groups of the economy bear the burden of the tax. Fairness is a subjective measure and the best that an economist can do is to identify how the burden of a given tax is distributed throughout the economy. In the case of the BET, over 60 percent of the tax base comes from wages and fringe benefits. It is believed that this portion of the tax would be borne by labor. The remainder of the base is from interest and dividends which is assumed to be borne by owners of capital. Compared to the state corporate income tax, this may be considered less equitable because under the state corporate income tax, firms received a deduction for wages and fringe benefits paid to

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employees. Because of this, labor is expected to bear a slightly larger share of the burden under the BET than under the state corporate income tax or net worth tax.¹⁴

The BET can be administered easily. In New Hampshire, this tax form is one page, consisting of a simple calculation. New Hampshire allows only two credits against the tax, thus reducing complexity. By comparison, the state corporate income tax is at least two pages not including worksheets and schedules. The components of the BET are, for the most part, easily identified. Total compensation, consisting of wages and salaries, employer contributions to employee benefit programs and pension contributions are all reported on the Federal tax forms for the appropriate business organization, as is interest paid. The amount of dividends paid is not currently reported on the Federal corporate tax return but is reported to the IRS.

The BET is not expected to be any more transparent to the tax payer than the existing corporate income tax. Any form of business taxation tends to hide the true cost of government from the voter by subsidizing part of government expenditures. This may cause the voter to vote for more government services than if the services were financed by a more transparent tax such as the sales or personal income tax.¹⁵

The standard of stability means that more stable tax bases are preferred to less stable ones. A stable tax base allows for greater predictability in revenues, which allows for better long range planning by state policy officials. There are several ways to measure the stability of a tax. We employ two measures, and for both the BET tax is found to be more stable than either the state corporate income tax or the state net worth tax, as shown in Figure 4 below.¹⁶ The most volatile of the tax bases are the

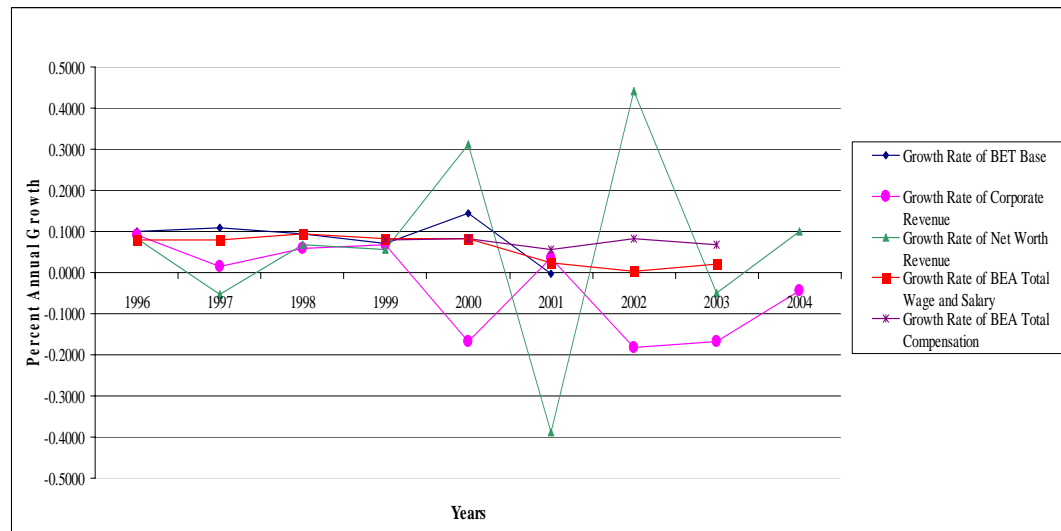
¹⁴ The net worth tax is assumed to fall on owners of capital initially. It may then be pushed on to corporate labor if labor is in a weaker bargaining position than owners of capital. The state corporate income tax is assumed to fall on both labor and capital.

¹⁵ This should not be taken as a reason to abolish all taxes on businesses. Businesses should be taxed in accordance with the benefits they receive from the government.

¹⁶ The annual growth rate of the BET tax base was estimated to have a coefficient of variation 0.59 while the state corporate income tax annual growth rate was estimated to have a coefficient of variation of 5.5. Another measure captures the predictability of the revenues from year to year. Using this measure, the BET base showed much greater predictability than the corporate income tax base or the net worth tax base.

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FIGURE 4. GROWTH RATES



Net Worth and the Corporate Income tax. The least volatile are the bases of total compensation and of wage and salaries, measured using data from the Bureau of Economic Analysis (BEA). The BET base falls in between the least and the most stable of these bases. The relatively low volatility of the BET base is largely due to the stability of wage and salary payments over time. Since these are such a large part of the base of the BET tax, they have a significant influence over its volatility.

5. Option 5. Compensation Tax

Another financing option is a compensation tax. This is a tax on total compensation and is the same type of tax used to fund the Social Security Trust fund. For ease of administration, the base of the education compensation tax could be defined to be the same as the Social Security tax. This base includes wages, fringe benefits, and other compensation up to \$90,000 in 2005.¹⁷ For a given individual, wages above \$90,000 would not be subject to tax. Alternatively, the education compensation tax could be modeled after the Medicare Hospital Insurance tax. The Medicare tax base is the same as the Social Security tax base but has no upper limit

¹⁷ The wage cap is indexed for inflation and increases each year. In 2004, all wages in excess of \$87,900 were exempt from the Social Security tax.

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on the amount of wages subject to tax. Therefore, this form of the tax could raise more money with a lower tax rate.

Revenue Effects

It is estimated that a rate of 4.5 percent would raise \$4.7 billion in 2006 with the Social Security wage cap in place. A rate of 4.5 percent would raise \$5.6 billion in the absence of a cap on earnings. An individual with wages of \$50,000 annually would be expected to pay \$2,250 a year in education compensation taxes assuming a 4.5 percent rate.

Properties of the Compensation Tax

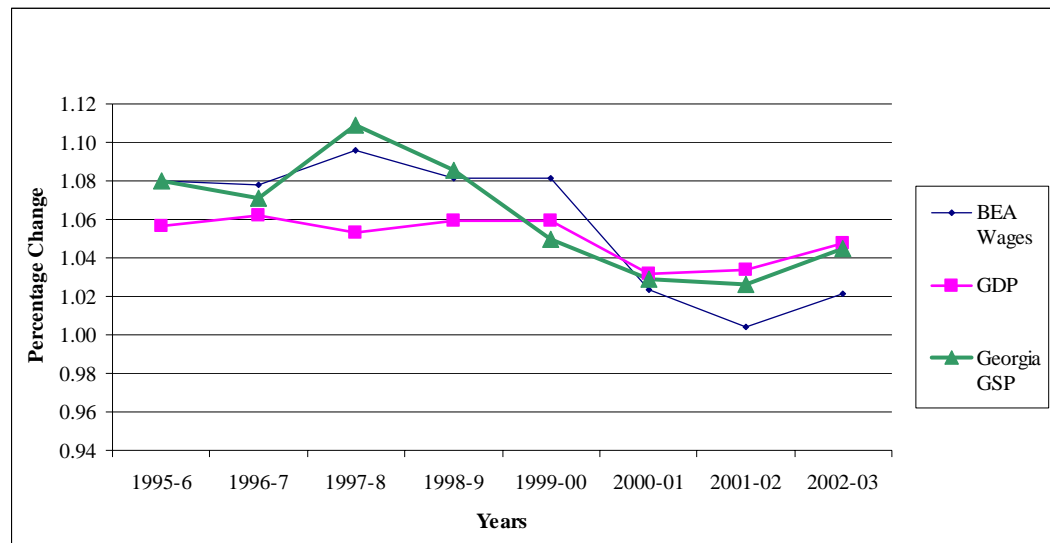
The administration of the tax could be similar to the existing Social Security tax. If the base is the same as the Social Security tax, then the marginal administrative cost should be very low. As with the Social Security tax, half of the rate could be levied directly on businesses with the other half coming from the employees. It is commonly believed that the employees bear the burden of both parts of the Social Security tax. Thus, it is anticipated that the distributional burden of a compensation tax would fall entirely on labor. Eliminating the wage cap spreads the burden of the tax to higher income workers but not to owners of capital.

The compensation tax base is relatively stable, as illustrated in Figure 5. It follows fairly closely the change in national Gross Domestic Product (GDP) and state Gross State Product (GSP). A stable tax base is desirable as it leads to predictability in the budget and planning process. However, because it does follow so closely with the turns in the economy, revenues from the base will fall in times of economic slumps.

In terms of equity, the burden of the compensation tax is expected to fall on workers. Of the universe of potential tax payers, workers tend to have lower incomes than owners of capital but are not necessarily low income. In this regard, a compensation tax is seen as more regressive than a full income tax. The replacement of the school property tax with a compensation tax represents a reduction in tax

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FIGURE 5. RATES OF CHANGE



burden to business as they are not expected to bear the burden of the compensation tax but do bear some burden of the existing property tax. Retired individuals, many of whom are currently exempt from the school property tax, would not be affected by the compensation tax.

Efficiency pertains to the behavioral effects of a tax. Efficient taxes are those that cause the least change to our existing economic behavior. A compensation tax is a tax on work and, as such, it is expected to reduce the incentive to work. This incentive is expected to grow stronger as the tax rate increases. Therefore, a compensation tax has the potential to reduce labor force participation at high rates of taxation. It is not expected that the compensation tax by itself will significantly affect labor force participation.¹⁸ A compensation tax can also be considered a tax on all consumption and all savings. In this way, a compensation tax affects both savings and consumption in the same way and would not create new incentives to alter our behavior other than the work decision.

¹⁸ If participation falls substantially due to the presence of the tax, then wages will rise as employers attract workers back into the labor force. Research has shown that teenage workers and secondary workers are those most likely to exit the labor force due to higher taxes.

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6. Option 6. Inheritance Tax

Introduction

A potential source of revenue for Georgia to help fund education lies in the estate tax. Georgia's current estate tax law is coupled with the federal law. Georgia levies a tax that is equivalent to the allowable federal tax credit for estate tax paid to states. However the federal estate tax state credit is being phased out and lapses on December 31, 2005. Without action from the State Legislature, Georgia's ability to collect estate tax will lapse as well. In the following sections we outline Georgia's current estate tax law, who pays estate tax, options for adopting an estate tax, and revenue projections.

Georgia's Estate Tax

In fiscal year 2002, Georgia raised \$123 million in estate taxes, not trivial, but small relative to school property taxes. This revenue stream is in jeopardy due to changes in the federal law. In 2001, the federal government passed legislation that phases out the state tax credit for estate tax by the end of 2005. Georgia, as well as 36 other states, couples its estate tax to the federal law. Georgia's estate tax is structured as what is called a "pickup" tax, because it equals the amount of the federal state tax credit. Thus, Georgia's estate tax does not add to the estate tax burden but merely picks up the portion allotted for the state tax credit. Due to the phase out of the state tax credit at the federal level, under current state law Georgia will not collect any tax on estates of any individuals who death occurs after December 31, 2005. It is estimated that some revenue will continue to be generated in the next few years due to the delay in paying the estate tax while the estate is settled. The State will likely collect no revenue from this source after 2007.

Georgia's Estate Tax Options

The Georgia legislature must actively alter the estate tax, or otherwise it will lapse. One possibility is for Georgia to change the language in its statute that links it to the federal law. (This is called decoupling.) Georgia could formulate a statute that calculates the estate tax due based on federal law prior to the 2001 amendment.

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Another option is partially decoupling. This maintains the state estate tax credit prior to 2001 amendments, but adopts the new federal increasing tax credit. Thus, in 2006 all estates less than \$2 million will have no estate tax liability. This means fewer estates will have any federal tax liability and thus no Georgia estate tax liability. A third possibility is that Georgia could adopt an inheritance tax of its own. As of June 2005, eighteen states and the District of Columbia had retained their estate taxes.¹⁹

Who Pays the Estate Tax?

The federal estate tax technically applies to all estates. However, due to a large tax credit only sizable estates end up having any tax liability. The basic formula for determining the amount of federal estate tax is as follows: first all allowable exemptions and exclusions are deducted.²⁰ This leaves the taxable value of the estate. Second, the appropriate tax rate is then applied, which is progressive and depends on the size of the estate. Third, the tax credit is then deducted from the estate. In 2001, this credit was \$220,550, reducing the estate tax owed to zero for any estate less than \$650,000. The value of this credit is scheduled to increase under the new law so that by 2009 only estates worth over \$3.5 million will have any federal estate tax liability.

Prior to the 2001 amendment, the federal tax credit for estate tax paid to states was also progressive and dependent on the size of the estate. For an estate with an adjusted taxable value of \$1 million, the state tax credit was \$33,200, roughly 3.3 percent. For an estate with an adjusted taxable value of \$10 million the state tax credit was \$1,076,720, or roughly 10.8 percent. For states like Georgia that employ a pickup tax, the total estate tax collected from the two example estates above would be \$1,109,920. Because of the structure of the tax, this amount would not increase the total estate tax liability to the individual.

¹⁹ Eighteen states and the District of Columbia have retained their estate taxes after the federal changes. Of these, fifteen states — Illinois, Kansas, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Rhode Island, Vermont, Virginia, and Wisconsin — and the District of Columbia decoupled from the federal changes. Three states — Connecticut, Nebraska and Washington — retained their tax by enacting similar but separate estate taxes (McNichol 2005).

²⁰ The allowable exemptions and exclusions include: bequests to a spouse, debts, charitable contributions, interest in family businesses, qualified pension plans, generation skipping transfers, and cost of administering the estate.

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In general very few people are affected by the estate tax. Nationally only 2 percent of all estates have any federal estate tax liability. In Georgia the figure is even lower. In 2002, only 1.3 percent of all estates had any tax liability. In addition, those that are affected tend to have very high incomes. A study by the Department of the Treasury estimated that 91 percent of all federal estate taxes paid come from the estates of people whose annual income exceeds \$190,000 (Lav and Friedman 2001).

Much of the debate surrounding the estate tax at the federal level consisted of its effects on small business and family owned farms. However, these types of businesses make up a very small percentage of those affected by the estate tax. In a 1998 survey done by the Department of Treasury, only 1.4 percent of all estates paying federal estate tax had over half of their assets in a family farm. Only 1.6 percent of all estate tax payers in 1998 had the primary share of their estate as a family owned business (Friedman and Lee 2003). Also, both family farms and small businesses enjoyed additional credits as well as other favorable treatment under the federal law.

More than 50 percent of the federal tax revenue comes from the taxation of estates that exceed \$5 million. In 2002, the state pickup tax was 9.6 percent of the federal estate tax on an estate of \$1 million and 20.8 percent of the federal tax on an estate of \$10 million. Thus, an even larger percentage of state pickup tax is paid by estates over \$5 million. Table 10 shows, for 2002, the U.S distribution by the size of the estates of the number, value, and tax liability.

TABLE 10. DISTRIBUTION OF ESTATES BY GROSS VALUE, 2002

Size of Total Gross Estate	% of Total Number of Taxable Estates	% of Total Value of Taxable Estates	% of Total Federal Estate Taxes
\$675,000 <\$1,000,000	29.3	9.6	2.3
\$1,000,000 <\$2,500,000	51.8	28.8	22.7
\$2,500,000 <\$5,000,000	11.4	14.9	20.3
\$5,000,000 or more	7.5	46.7	54.7

Source: Internal Revenue Service, <http://www.irs.gov/pub/irs-soi/02es01ge.pdf>.

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Georgia Estate Tax Revenue

We estimated estate tax revenue under the assumption that Georgia was to keep its estate tax after the federal credit is phased out. Table 11 illustrates anticipated revenue from fully decoupling from the federal tax law and only partially decoupling.²¹ Without uniform federal treatment of estate taxes, it is possible to avoid state estate taxes by moving. In addition, if wealthy Georgians moved to avoid an estate tax, Georgia would also lose out on all the other tax revenue that these former residents generated. Thus, Georgia could possibly suffer a net loss of tax revenue due to the adoption of an estate tax.

**TABLE 11. GEORGIA FISCAL YEAR ESTATE TAX REVENUE ESTIMATES
(IN MILLIONS OF \$)**

	----Fully Decoupled----		---Partially Decoupled---	
	FY 06	FY 07	FY 06	FY 07
Estimated Revenue of Georgia Estate Tax	\$121.0	\$129.0	\$101.6	\$104.5

Source: Center on Budget and Policy Priorities, <http://www.cbpp.org/1-31-02sfp.pdf>.

Will residents move to avoid estate taxes? This is a topic of interest to researchers due to the phasing out of the federal law and the lack of uniform tax treatment of estate taxes by states. Some evidence exists to support the proposition that the elderly do move based on tax levels within the state. However, this migration is estimated to be relatively small compared with the revenue loss if taxes were lowered (Duncombe, Robbins, and Wolf 2000; see also Rork and Conway 2003). Duncombe, Robbins, and Wolf found that for states looking to attract retirees, marketing local amenities would be generally more effective than tinkering with the state's tax system.

However, for estate tax purposes it is only a small percentage of the elderly, the wealthy elderly, who might be affected by the estate tax. Bakija and Slemrod (2004) examined the federal estate tax filings in each state from 1965 to 1998. They

²¹ Center on Budget and Policy Priorities (CBPP) obtained these estimates from Georgia budgetary officials. However, it is unclear whether these forecasts include potential changes in behavior due to the non-uniform treatment of estate taxes by the states. For the remainder of this section we assume that they do not.

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determined that higher state inheritance, estate and sales taxes do have a modest negative effect on the number of federal estate tax returns filed in the state. They develop a model to ascertain the revenue implications for the average state and estimate the expected revenue loss in terms of percentages of average state estate tax revenue. Their estimates are based on states retaining the same federal estate tax structure prior to the 2001 amendments. The range of coefficients is based on different model specifications. Using these coefficients and estimates of projected estate tax revenues from Table 11 for the fiscal years 2006 and 2007; we estimate the behavioral adjusted estate tax revenue for the state of Georgia in Table 12.

TABLE 12. ESTIMATED GEORGIA ESTATE TAX COLLECTIONS (IN MILLIONS OF \$)

Percent Loss of Avg. Estate Tax*	----Fully Decoupled----		--Partially Decoupled--	
	FY 06	FY 07	FY 06	FY 07
6.20%	\$ 113.50	\$121.00	\$ 95.30	\$ 98.20
8.90%	\$ 110.23	\$117.52	\$ 92.56	\$ 95.20
11.90%	\$ 106.60	\$113.65	\$ 89.51	\$ 92.06
13.50%	\$ 104.67	\$111.59	\$ 87.88	\$ 90.39

* Based on Bakija and Slemrod (2004) behavioral response coefficients.

Assuming the highest percent loss due to tax avoidance, Georgia would still collect an estimated \$104.67 million in fiscal year 2006 if it fully decoupled from the federal law and \$87.88 million if it only partially decoupled. These estimates represent between 85 percent and 71 percent of the estate tax collected in 2002.

If some of the wealthy elderly moved out of Georgia due to the presence of an estate tax, other tax revenue would also be lost. Bakija and Slemrod estimate the amount of sales tax, property tax, and income tax that would be lost to the average state due to loss of an average estate tax paying resident. Their estimated annual loss for these three taxes is \$22,600. This is 14.6 percent of the average estate tax liability of \$155,500. Bakija and Slemrod use this percentage to reformulate the percent loss listed in Table 12. These estimates depend on how soon before death the taxpayer moves. Bakija and Slemrod can only extrapolate from the sample tax returns on when a person might move. If the person were to move five years before death, this would increase the loss of total tax revenue, estate, sales, property and income tax, by a range of between 10.7 and 23.2 percent of the static revenue from decoupling the

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state estate tax from the federal estate tax. If the move occurred ten years before death this increases the range to 15.2-33.1 percent.

It is important to note that these estimates represent the worse case scenarios for tax loss. It is unlikely that when the typical estate tax payer moves, her prior residence will remain unoccupied. Thus, the new resident will contribute to the tax base. It is also possible that the typical estate tax paying resident doesn't physically move, but rather just changes place of residence and now just spends less time at the Georgia domicile. Using the highest estimated total tax loss from Bakija and Slemrod (2004), Georgia would still collect more than \$67 million annually by decoupling from the federal system.

In order to change its law Georgia would only have to adopt language in its current statute that ties its estate tax to the Federal law before the 2001 amendments. State tax filers would have to fill out a federal estate tax form with the 2001 structure. The additional form should not be any great administrative burden to Georgia as usually less than 1,000 estates per year have any estate tax liability.

Conclusion

Maintaining the estate tax is a viable revenue option for Georgia in order to fund additional state spending on education. Revenue estimates for the estate tax are close to \$100 million in fiscal year 2006, even after accounting for potential avoidance strategies. Furthermore, the tax affects very few Georgians and is not likely to cause any large-scale migration of the wealthy elderly. However the legislature must act, otherwise, Georgia's ability to collect an estate tax will lapse with the federal credit at the end of 2005.

7. Option 7. Miscellaneous Taxes

There is a host of other possible revenue sources, some of which Georgia currently levies and many that are not used in Georgia.

The alcohol and tobacco related taxes (or "sin taxes") are often viewed as politically expedient sources of revenue because, in addition to the revenues provided, they offer societal benefits through the reduction of risky behavior among

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Georgia residents. Together the alcohol and tobacco related taxes presently generate \$360 to \$380 million in annual revenues. This is a small fraction of the revenues necessary for replacing the property tax. Furthermore, large increases in the tax rates among these goods are likely to have a substantial behavioral response from consumers, which would likely offset a large part of the gains in revenues.

Georgia's tax on cigarettes is currently 37 cents per pack. The U.S. median is 69.5 cents per pack. Thus, Georgia could nearly double its tobacco tax rates and still be about average for the U.S. (See Seaman (2003) for an analysis of Georgia's tobacco taxes.) Georgia's excise tax on liquor is \$3.79 per gallon, while the national average is \$3.75 per gallon. Georgia's excise taxes on beer and on wine are well above the national average. For beer Georgia is at \$0.48 per gallon compared to the national median of \$0.188 per gallon, and for wine it's \$1.51 per gallon in Georgia while the national average is \$0.69 per gallon.

There are many taxes or fees imposed by other states or that have been suggested by others. These include the following:

- a tax on the disposal of hazardous waste;
- a severance tax;
- a tax on auto leasing;
- a tax on controlled substances;
- a tax on certain types of exhibitions;
- a tax on use of carbon (e.g., coal);
- a tax on disposable items such as cups, bags, diapers, cans, bottles, plastic wrap, etc.;
- a tax on restaurants beyond the sales tax;
- a tax on chemicals such as dry cleaner PCE (perchloroethylene), pesticides, etc.;
- a luxury excise tax on expensive cars, SUVs, boats, etc.

In addition, the State could consider increasing fees so that they cover more of the cost of the service being provided, for example college tuition, fees for driver's licenses, etc.

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E. General Issues Regarding Taxation

In this section we first discuss the principle that should be used in evaluating tax policy options. We then discuss two tax issues, namely equity and fairness and volatility of the taxes.

1. Issue 1: Principles for Evaluating Taxes

While no one really likes any tax, there are some taxes and tax systems that do a better job of raising the revenue needed to support public expenditures than others. In this section we discuss the basis on which to judge which tax or tax system does a better job.

Economic Neutrality

Taxes that do not interfere very much with decisions made by individuals and businesses are thought to be “better” taxes just for that reason—they do less to disrupt our everyday decisions than do other taxes. Extreme cases may help to emphasize this point. A sales tax that taxes only the consumption of blue jeans will no doubt reduce how many blue jeans are bought and consumers might switch to buying khaki pants or corduroy pants instead. The people who make jeans could see reduced business and not all jeans producers can switch to making khaki pants. On the other hand, a sales tax that is applied to all clothing and all other goods does not force us to change our purchases from blue jeans to khakis. If the sales tax is broad based, all individuals certainly have to face the tax, but they do not, in addition, have to face the uncomfortable decision of switching from blue jeans to khaki pants. The more a tax system affects those kinds of decisions, the worse a tax system we have. Therefore, one principle to consider when talking of “rating” a tax system or when talking of a tax change is whether or not the current tax has a big impact on consumption and production decisions or if a move to a new tax will affect consumer and producer decisions more or less than other possible changes. In general, broad-based taxes and tax systems affect these decisions less than taxes that give many tax breaks or exempt certain sectors. The current sales tax in Georgia is a case in point—

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consumption of shoes and clothes is taxed but consumption of hair cuts and car maintenance is not taxable. If sales taxes as currently defined were substituted for property taxes for school funding, consumption and production decisions might be heavily affected by this change. A more broad-based sales tax (different from current law) would have less of these types of impacts.

Adequacy

Another principle of taxation is that the revenue yield of a tax system should be “adequate” to fund necessary public expenditures at reasonable rates. The notion of adequacy is quite hard to define, but in the case of funding for major public expenditures like schools, infrastructure, health and the like, taxes that are unlikely to raise much revenue would not be very useful.

Buoyancy

A third principle of taxation that follows closely the notion of revenue adequacy is the issue of how quickly revenue grows as the economy grows. This relationship is referred to as “revenue buoyancy.” As our economy grows, there are increased demands put upon the public sector and these range from demands for improved services (better school buildings, more computers, better roads) to demands for new services (telecommunications support, recreation centers, etc.). If the revenue from a particular tax does not grow as the economy grows, government is not able to meet the increased demands of their constituents. This happens if the tax base does not reach the growing sectors of the economy such as Georgia’s current sales tax. It is important for the revenue not to grow too quickly as the economy grows, so buoyancy should be carefully weighed against the overall stability of the revenue—which is itself an important criteria for evaluating taxes.

Fair and Equitable

In addition to the criteria or principles already mentioned, good taxes are “fair” or equitable taxes. Equity is in some respects in the eye of the beholder. How much progressivity there should or should not be in terms of tax burdens is very

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much an issue of public debate. However, taxes that have a big impact on distribution—those that are very progressive for example, may end up causing people and businesses to move to avoid (or take advantage of) the tax. This is particularly true at the state and local level, where high income taxes for example could cause people to move out of the state (or out of a city). There is another important concept related to equity among “like” individuals. The notion of horizontal equity suggests that taxpayers in similar circumstances should be treated similarly by the tax system. If a tax gives special treatment to certain types of business or to certain individuals by exempting them from tax, many other taxpayers would view this as “unfair” and may in turn reduce their voluntary compliance with the tax system.

Administrative Simplicity

Finally, taxes should be evaluated against the principles of simplicity and administrative costs. A good tax is one that imposes a lighter burden on taxpayers to comply and is not very costly to administer. Some would argue that the property tax takes very little of taxpayers’ time to comply. Contrast that with the time it takes taxpayers to file federal tax returns!

2. Issue 2: Equity and Fairness

The distribution of tax burdens across income levels differ by tax. A report from the Institute on Taxation and Economic Policy (2003) (ITEP) provides estimates of the distribution by income level of the sales tax, property tax, and the personal income tax for each state including Georgia. The ITEP estimates are based on economic theory as to who bears the burden of these taxes. Tax burden refers to decreases in income and increases in the cost of consuming goods and services that result from the tax.

The ITEP calculates effective tax rates (tax burden divided by income) for the existing level of tax collections, which differ by tax. But, we are interested in how the distributions of burdens differ by tax when the tax collections are the same for each of the three taxes, sales, property and income. Thus, for an income we cannot directly compare ITEP’s estimated effective tax rates for the three taxes. Instead, for

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each tax we compare the effective tax rates for each income level relative to the effective tax rate for the lowest income level. If this ratio falls as income increases, the tax is regressive, while if the ratio increases, the tax is progressive.

As can be seen in Table 13, for both the sales and property taxes, the ratio of effective tax rates falls as one move to higher income groups, and thus these two taxes are regressive. Since the ratio declines more rapidly for the sales tax than for the property tax, the sales tax is more regressive than the property tax. Table 13 shows that the income tax is progressive. Thus, replacing the school property tax with a sales tax will increase the regressivity of the tax system.

TABLE 13. GEORGIA'S EFFECTIVE TAX RATES BY INCOME GROUPING

		Ratio of the Effective Rate to Effective Rate -----of Lowest Income Group-----		
Income Group	Income	Sales Tax	Property Tax	Income Tax
Lowest 20%	< \$15,000	1.0	1.0	1.0
Second 20%	\$15,000-\$20,000	0.87	0.72	3.5
Third 20%	\$20,000-\$41,000	0.74	0.63	4.8
Fourth 20%	\$41,000-\$69,000	0.63	0.59	5.8
Next 15%	\$69,000-\$142,000	0.46	0.66	6.5
Next 4%	\$142,000-\$281,000	0.30	0.63	7.0
Next 1%	>\$281,000	0.15	0.28	7.8

Source: Based on Institute on Taxation and Economic Policy (ITEP) (2003).

The sales tax tends to be more regressive because:

- Wealthier individuals tend to purchase items not subject to the sales tax (e.g., services);
- Wealthier individuals are more likely to take advantage of the favorable tax treatment afforded to goods purchased online or from a catalogue;
- Wealthier individuals are more likely to save, effectively sheltering this income from the sales tax.

The property tax is less regressive than the sales tax since part of the property tax is borne by owners of land and capital, who tend to have higher income. Furthermore, the ratio of home values relative to income tends to be constant to slightly declining as income increases.

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The income tax is progressive. The reason is the progressive nature of the rate structure. But, because the top income tax rate of 6 percent is reached at a relatively low-income level, the Georgia income tax is not as progressive as in some other states. In the upper half of the income distribution, the Georgia personal income tax is much less progressive because the top tax rate of 6 percent is reached at a relatively low income level.

We also calculated what an average person might pay in sales, property and income tax for three Georgia counties, Appling, Bullock, and Cobb. Using data from the 2000 Census of Population and Housing, we calculated the average house value for households with incomes of \$20,000, \$40,000 and \$80,000. Note that there is a wide variation in the house value for households with the same income. Using the 2004 property tax rate for school systems in those counties and the allowable regular homestead exemption, we calculated the property taxes that each household would be expected to pay. We used the Survey of Consumer Expenditures to calculate what a typical household with those income levels would pay in sales taxes for a 3 percent sales tax that applied to food. We made allowances for differences in consumption patterns between rural and urban areas. Finally, we calculated the income tax that each household would be expected to pay, assuming that the household is a family of four, that they file income taxes jointly, and the \$20,000 and \$40,000 income households are not itemizers for income tax purposes. We adjusted the income tax rates so that the total revenue would equal the revenue from a 3 percent sales tax. The resulting taxes are presented in Table 14.

TABLE 14. ESTIMATED TAX PAYMENTS FOR THREE REPRESENTATIVE HOUSEHOLDS

Income	-----Appling-----			-----Bullock-----			-----Cobb-----		
	Property Tax	Sales Tax	Income Tax	Property Tax	Sales Tax	Income Tax	Property Tax	Sales Tax	Income Tax
\$20,000	\$350	\$433	\$66	\$320	\$433	\$66	\$860	\$424	\$66
\$40,000	\$487	\$651	\$636	\$371	\$651	\$636	\$902	\$597	\$636
\$80,000	\$531	\$888	\$1,480	\$499	\$888	\$1,480	\$1160	\$756	\$1,480

Because of the low house values and tax rates in Appling and Bullock Counties, the three households in these three counties would pay more in sales tax than in property taxes. On the other hand, households in Cobb County would pay

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more in property taxes than sales taxes. Income taxes are lower than sales and property taxes for a household with a \$20,000 income, but higher for the household with an \$80,000 income.

In spite of the regressivity of the sales tax, the property tax is perceived to be less fair than the sales tax, due largely to errors in property assessment. Fairness here refers to the equal treatment of those with equal ability to pay. For example, two individuals who purchase the same consumer good will pay the same sales tax. But two individuals who own similar houses may have different assessed values and hence pay different amounts of property tax. While there are differences in the consumption pattern of households with the same income, there are very large differences in property values for households with the same income. Thus, for the property tax there is less correlation between property tax payments and income. Shifting to a sales tax to fund education would be seen by many as an increase in the horizontal fairness of the tax system.

To some extent, both the property tax and the sales tax are exported to non-residents of Georgia. For example, manufacturers probably pass on part of their property taxes in the form of higher prices that are paid by non-residents. Sales taxes are paid in part by visitors from outside the state. Thus, to some extent, the costs of education would be exported whether we use the property or sales tax. The relative share of either tax that is exported is, however, currently unknown.

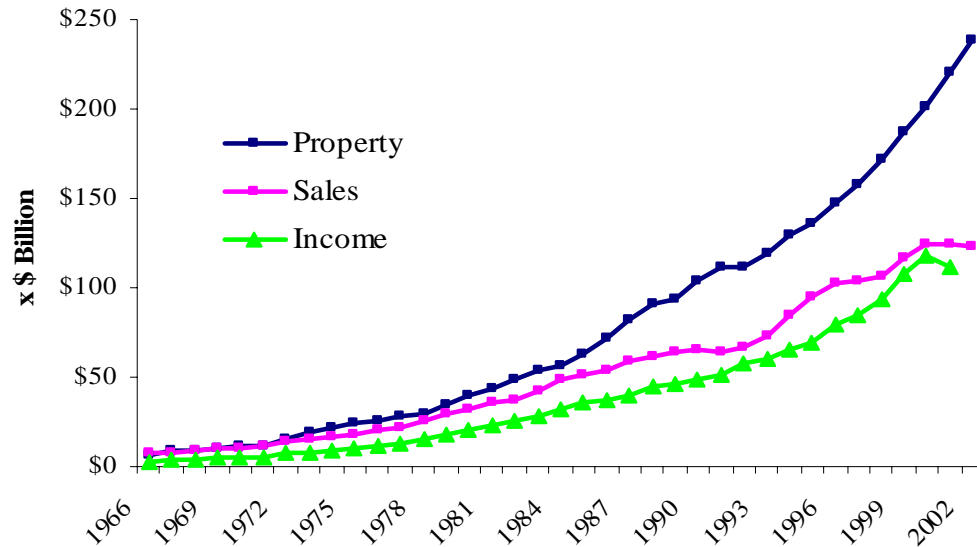
3. Issue 3: Tax Base Volatility in Georgia

In this section we discuss the volatility of the sales, income, and property tax bases. A more volatile tax is less desirable because it makes budgeting more difficult.

The historic trends of the three tax bases are shown in Figure 6. From 1969 through 2002, the property tax base grew at an average annual rate of 10.8 percent, the sales tax base grew at an annual average rate of 8.2 percent. Taxable income increased at 11.0 percent per year. Figure 6 shows that the property tax base, on a state-wide basis, has enjoyed greater growth over the period than the sales tax base or personal income tax base.

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FIGURE 6. HISTORIC GROWTH OF TAX BASES IN GEORGIA



Government budgets are based on assumptions of predictable and steady growth. Thus, one way to look at issues of volatility in tax bases is to examine how well one year's base can be predicted from the last year's value. For each of the three bases the percentage growth from one year (year 1) to the next (year 2) was calculated and the result multiplied by the actual year 2 base to predict year 3. The prediction was compared, as a percentage, to the actual year 3 base to get the prediction error. The process was repeated for each year through the study period. The average of the errors is used as an index so the three taxes may be compared. Table 15 presents the computed Annual Prediction Error Indices for the three taxes for the entire period and for sub periods. The larger numbers represent greater prediction error. These results are consistent with the results for other measures of volatility.

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TABLE 15. PREDICTION ERROR INDEX

	Property Tax Base	Sales Tax Base	Income Tax Revenue
Entire Period	4.50	3.99	4.70
1968 – 1980	6.98	4.31	6.51
1980 – 1991	3.57	3.27	3.28
1991 - 2002	2.63	4.26	3.82

In Georgia, the state’s sales tax base and personal income tax base have become more volatile in recent years, while the property tax base has become more stable. The reduced volatility of the property tax is likely due to the state’s greater attention to assessment uniformity and more regular re-assessments. For income and sales taxes the recent recession is a likely factor, as is the “bursting” of the high-tech stock bubble.

The trends for sales and income tax bases are not unusual as similar trends have been observed in many other states. Additionally, Georgia’s personal income tax tends to be slightly more volatile than the sales tax base; also a national trend. Reliance on these taxes has created a measure of “revenue uncertainty” in many states and localities because of their volatility.

In Georgia, a move away from use of property taxes to fund K-12 education toward a sales tax (or a personal income tax) is likely to introduce a greater measure of year-to-year uncertainty into revenue predictions for school budgets. Knowing this is likely to be the case, several policies could be considered to complement a more volatile tax:

- Avoid placing total reliance on one single tax base or revenue source for such a large item as state-wide K-12 education. The addition of a small property tax, for example, could increase revenue stability. While not advocating inclusion of a property tax, examination of alternative additional taxes is in order.
- Broaden the sales tax to include selected services. Exclusion of food from the sales tax has narrowed the base and made the tax more volatile. Inclusion of more services will broaden the base and, depending on the services included, may positively address volatility.
- Build-up budgetary reserves. This is probably the most effective and realistic tool for dealing with the revenue fluctuations almost certain to

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come with a shift away from use of property taxes to fund K-12 education. Revenues set aside during periods of growth can be used to preserve educational effort and programs during times of economic downturns.

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Appendix A. Proposed Constitutional Amendment

House Resolution 1264

By: Representatives Keen of the 146th, Richardson of the 26th, Jamieson of the 22nd, Houston of the 139th, Rogers of the 20th, and others

A RESOLUTION

Proposing an amendment to the Constitution so as to eliminate the provisions requiring the funding of education by ad valorem taxation and provide for replacement fundings through the imposition of a state sales and use tax at a rate not to exceed 3 percent, as determined by the General Assembly; to provide for procedures, conditions, and limitations; to provide for the submission of this amendment for ratification or rejection; and for other purposes.

BE IT RESOLVED BY THE GENERAL ASSEMBLY OF GEORGIA:

SECTION 1.

Article VIII, Section VI of the Constitution is amended by adding a new paragraph at the end to be designated Paragraph V, to read as follows: "¶Paragraph V. *Ad valorem power limited.* The authority provided under this Constitution to levy and collect ad valorem taxes for educational purposes shall continue on and after January 1, 2006, but only for the purpose of retiring any outstanding public debt or any bonds or obligations issued or incurred by a local school system of this state for educational purposes on or before December 31, 2005. Once such debt is retired, the provisions of Section VIA shall become applicable."

SECTION 2.

Article VIII of the Constitution is amended by adding a new section immediately following Section VI, to be designated Section VIA to read as follows:

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"SECTION VIA. STATE TAXATION FOR EDUCATION

Paragraph I. *State Taxation for Education.* (a) Except as otherwise provided in Paragraph V of Section VI, the authority provided under this Constitution to levy and collect ad valorem taxes for educational purposes shall continue until December 31, 2005, and, on and after January 1, 2006, such authority shall cease and no ad valorem taxes for educational purposes shall be levied in this state.

(b) In addition to any state or local sales and use tax in effect on January 1, 2006, there is imposed effective on that date and thereafter a state sales and use tax at a rate not to exceed 3 percent as determined by the General Assembly. The sales and use tax imposed by this subparagraph shall correspond to the state sales and use tax imposed by the revenue laws of this state, as now or hereafter amended, except as otherwise provided in this Paragraph. The tax shall not apply to sales of motor fuels. The tax imposed pursuant to this subparagraph shall not be subject to any sales and use tax exemption provided by general law unless expressly provided otherwise by the General Assembly. The tax imposed by this subparagraph shall be levied and collected in the same manner as the other state sales and use tax is levied and collected. Such proceeds shall be deposited in appropriate accounts as may be established by general law. All or any portion of such proceeds shall be used for educational programs and purposes prior to the college or postsecondary level in such manner as determined by the General Assembly or other appropriate uses."

SECTION 3.

The above proposed amendment to the Constitution shall be published and submitted as provided in Article X, Section I, Paragraph II of the Constitution. The ballot submitting the above proposed amendment shall have written or printed thereon the following:

"() YES Shall the Constitution be amended so as to eliminate local ad valorem property taxes for education and replace them with
() NO a sales and use tax not to exceed 3 percent?"

All persons desiring to vote in favor of ratifying the proposed amendment shall vote "Yes." All persons desiring to vote against ratifying the proposed amendment shall vote "No." If such amendment

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shall be ratified as provided in said Paragraph of the Constitution, it shall become a part of the Constitution of this state.

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Appendix B. Financing an Adequate Education

Assume that the State decides not to eliminate school property taxes and that the State desires to increase the minimum expenditures per student, perhaps because of a Court order. In this Appendix we discuss some of the issues associated with increasing minimum revenue per student.

As noted in the text, we assume that \$7,500 per student in FY 2004 would be the cost of an adequate education. Recall that \$7,500 is the *minimum* expenditure per student averaged across a representative set of students, and thus, allows for special learning programs for the learning challenged and honors students. It does not mean there will be no variations in expenditures per student by program type and school level. The number is for standard education programs and associated expenses such as administration. In FY 2004, these expenditures in Georgia were \$6,728 per student. Neither the \$7,500 per student nor the \$6,728 per student includes funding required for construction or special programs such as school nurses, nor does it include federal programs such as Title I.

For FY 2004, Georgia (state plus local systems) had general fund spending of \$10,084.2 million for the 1,498,777 students, or \$6,728 per student (2003-2004 Annual Report Card). Expenditures per student of \$7,500 would cost \$11,240.8 million.

To ensure that every district has at least \$7,500 per student, the State can either mandate that each local school system spend at least that much and require them to increase their property tax to do so, or set the foundation level in the QBE program at \$7,500. Mandating that districts increase spending to at least \$7,500 per student is tantamount to requiring low spending districts to increase property tax rates. This would require an increase in property tax revenues of \$1,193 million, an increase of about 5 mills on average, assuming no increase in State government funding.

The other option is for the State to set the QBE foundation level (i.e., QBE earnings) at \$7,500. This would ensure that every school district had at least \$7,500

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per student to spend.²² If a local school system wanted, it could supplement this with local funding, as is done now. Of the 180 school systems in Georgia, 158 had state and local general fund revenues of less than \$7,500 per student in FY 2004 (Georgia Department of Education, Revenue Report).

Providing \$7,500 per student through QBE would have cost \$11,240 million in FY 2004. In FY 2004, school systems had total state revenue of \$6,707 million, including QBE earnings, categorical grants, and equalization funding, but excluding transportation, nursing, and scarcity grants (FY 2004 Earnings Sheet). But the local school systems' required local 5 mill share totaled \$1,206 million, so that the State provided \$5,501 million to school systems (FY 2004 Earnings Sheet). Thus, to increase minimum revenue per student to \$7,500 the State would have to increase its current spending of \$5,501 million by \$4,533 million, or by 82.4 percent.

If the minimum required revenue per student is \$7,000, the cost to the State would be \$3,784 million. While if the minimum required revenue per student is \$6,500, the cost to the State would be \$3,034 million.

To put these amounts in perspective, in FY 2004 lottery revenue was \$787 million, the corporation income tax revenue was \$487 million, and sales tax revenue was \$4,861 million.

Increasing the minimum funding to \$7,500 per student guarantees that each school system will have at least \$7,500 per student. While school systems must impose a property tax of 5 mills, all school systems currently impose a property tax greater than 5 mills. We expect that if the State increased its funding by 82.4 percent, local school systems would reduce their property tax rates. Consider first the 158 school systems that currently have revenues less than \$7,500. Assume that when the State increases education spending these school systems will not spend more than \$7,500. This means that these school systems will cut their property tax to the required local 5 mill share. We assume that the 22 school systems that currently

²² We use data on revenue rather than expenditures because we need to distinguish between local and state contributions and that is not possible using expenditure data. In FY 2004, total state and local general fund revenue was about \$200 million more than total state and local general fund expenditures.

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spend more than \$7,500 will maintain their current level of education expenditures, which means they would be able to cut their taxes by the amount of increase in State funding. The estimated total reduction in property taxes is \$3,130 million. This is an upper bound of the likely decrease. This implies that total state and local revenue for education would increase by at least \$1,403 million, consisting of an increase of \$4,533 million in increased State government contributions and a possible reduction of up to \$3,130 million in local contributions.

The State can shift some of the required \$4,533 million increase to local school systems by increasing the required local contribution say, to 10 mills or to 15 mills. The required increase in State spending would be \$3,327 million if local school systems had to contribute 10 mills, and \$2,120 million if school systems had to contribute 15 mills.

There are 14 school systems with a millage rate of less than 10 mills. Six of these systems have a one percent sales tax that can be used for general operations. Counting the local sales tax revenue as part of the school systems' required share means that only 10 school systems would have to increase their millage rates if the required millage rate was 10 mills. The total increase in property tax revenue for these 10 systems would be \$16.2 million. This would be about a 0.24 percent increase in total property taxes in Georgia. These systems would have to increase their millage rates by an average of 1.49 mills, with a range of increases of 0.17 mills to 4.7 mills (Bremen City). Only one system would have to increase its millage rate by more than 3 mills.

There are 95 school systems with a millage rate of less than 15 mills. But 10 of these systems have a local sales tax that can be used for operations. Including the sales tax revenue as part of the school systems required share means that 90 school systems would have to increase their millage rates if the required millage rate was 15 mills. This would increase property tax revenue by about \$53.0 million, or about a 0.8 percent increase in total property taxes in Georgia. These systems would have to increase their millage rates by an average of 1.08 mills, with a range of increases of 0.02 mills to 9.7 mills (Bremen City). Eighteen systems would have to increase their millage rate by more than 3 mills.

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Increasing the required millage rate to 10 or 15 mills is unlikely have much effect on the location of businesses. As discussed above, while research has shown that property tax rate differentials will lead to migration of the property tax base to the jurisdiction with the lower property tax rate, the increases required to get all systems to 10 to 15 mills, in general, are modest.

Finally suppose the State eliminated the local school property tax and increased spending to \$7,500 per student, the cost to the State government would be \$5,734 million. This amount is comprised of the reduction in school property taxes of \$4,557 million, and the amount needed to increase the average state and local revenue for basic programs from the current (FY 2004) \$6,728 per student to \$7,500 per student, which is \$1,157 million.

Table B.1 summarizes the various options.

TABLE B.1. COST OF ALTERNATIVES TO ACHIEVING A MINIMUM EXPENDITURE PER STUDENT OF \$7,500

Option	-----Change in Taxes in FY 2004-----	
	State Government	Local School Systems
1. Mandate \$7,500 to be funded by local property taxes		\$1,193 million
2. Increase QBE foundation to \$7,500 and retain the required local 5 mills	\$4,533 million	-\$3,130 million (upper bound estimate)
3. Increase QBE foundation to \$7,500 and increase required millage to 10 mills	\$3,327 million	\$16.2 million
4. Increase QBE foundation to \$7,500 and increase required millage to 15 mills	\$2,120 million	\$53.0 million
5. Increase QBE foundation to \$7,000 and retain the required local 5 mills	\$3,784 million	-\$1,576 million (upper bound estimate)
6. Increase QBE foundation to \$6,500 and retain the required local 5 mills	\$3,304 million	-\$718 million (upper bound estimate)
7. Increase QBE foundation to \$7,500 and eliminate school property taxes	\$5,734 million	-\$4,557 million

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Appendix C. Current Exemptions from the State Sales and Use Tax

The following are summary statements of the existing exemptions. Certain restrictions may not be described. For the complete text, please see the Georgia code.

Exemptions listed in 48-8-2:

(B)(ii) The sale of electricity used directly in the manufacture of a product if the direct cost of such electricity exceeds 50 percent of the cost.

(C) Rooms, lodgings, or accommodations supplied for a period of 90 continuous days or more;

Exemptions listed in code section 48-8-3:

(1) Sales to the United States government, this state, any county or municipality.

(2) Transactions in which tangible personal property is furnished by the United States government or by a county or municipality of this state to any person who contracts to perform services for the governmental entity for the installation, repair, or extension of any public water, gas, or sewage system of the governmental entity when the tangible personal property is installed for general distribution purposes.

(3) The federal retailers' excise tax if the tax is billed to the consumer separately from the selling price of the product or from the tax on motor fuel taxes;

(4) Sales by counties and municipalities arising out of their operation of any public transit facility and sales by public transit authorities.

(5) Fares and charges, except charges for charter and sightseeing service, collected by an urban transit system for the transportation of passengers.

(6) Sales to any hospital authority.

(6.1) Sales to any housing authority

(6.2) Sales to any local government authority which has as its principal purpose or one of its principal purposes the construction, ownership, or operation of a coliseum and related facilities to be used for athletic contests, games, meetings, trade fairs, expositions, political conventions, agricultural events, theatrical and musical performances, conventions, or other public entertainments or any combination of such purposes;

(6.3) Sales to any agricultural commodities commission.

(7) Sales to a nonprofit licensed nursing home, nonprofit licensed in-patient hospice, or a nonprofit general or mental hospital.

(7.1) Sales to a nonprofit organization, the primary function of which is the provision of services to mentally retarded persons.

(7.2) Sales to any chapter of the Georgia State Society of the Daughters of the American Revolution

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- (8) Sales to the University System of Georgia and its educational units;
- (9) Sales for educational purposes to private colleges and universities in this state
- (10) Sales for educational purposes to private elementary and secondary schools
- (11) Sales to any tax exempt educational or cultural institute which: furnishes at least 50 percent of its programs through universities and other institutions of higher education in support of their educational programs; is paid for by government funds of a foreign country; and is an instrumentality, agency, department, or branch of a foreign government operating through a permanent location in this state;
- (12) School lunches of public schools;
- (13) Sales of food to private elementary and secondary schools
- (14) Sales of objects of art and of anthropological, archeological, geological, horticultural, or zoological objects or artifacts and other similar tangible personal property to or for the use by any museum or organization which is tax exempt
- (15)(A) Sales of any religious paper owned and operated by religious institutions or denominations
- (15)(B) Sales by religious institutions or denominations for fund raising activity;
 - (15.1) Sales of pipe organs or steeple bells to any church
- (16) The sale or use of Holy Bibles, testaments, and similar books commonly recognized as being Holy Scripture;
- (17) The sale of fuel and supplies for use aboard ships plying the high seas
- (18) Charges made for the transportation of tangible personal property including, but not limited to, charges for accessorial services such as refrigeration, switching, storage, and demurrage made in connection with interstate and intrastate transportation of the property;
- (19) All tangible personal property purchased outside of this state by persons who at the time of purchase are not domiciled in this state but who subsequently become domiciled in this state and bring the property into this state for the first time as a result of the change of domicile, if the property is not brought into this state for use in a trade, business, or profession;
- (20) The sale of water delivered to consumers through water mains, lines, or pipes;
- (21) Sales, transfers, or exchanges of tangible personal property made as a result of a business reorganization when the owners maintain the same proportionate interest.
- (22) Professional, insurance, or personal service transactions which involve sales as inconsequential elements for which no separate charges are made;
- (23) Fees or charges for services rendered by repairmen for which a separate charge is made;
- (24) The rental of videotape or motion picture film to any person who charges an admission fee to view such film or videotape;

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- (25) The sale of seed; fertilizers; insecticides; fungicides; rodenticides; herbicides; defoliants; soil fumigants; plant growth regulating chemicals; desiccants; and feed for livestock, fish, or poultry when used either directly in tilling the soil or in animal, fish, or poultry husbandry;
- (26) The sale to persons engaged primarily in producing farm crops for sale of machinery and equipment which is used exclusively for irrigation of farm crops
- (27) The sale of sugar used as food for honeybees kept for the commercial production
- (28) The sale of cattle, hogs, sheep, horses, poultry, or bees when sold for breeding purposes;
- (29) The sale of the following types of agricultural machinery:
- (A) Machinery and equipment for use on a farm in the production of poultry and eggs for sale;
 - (B) Machinery and equipment used in the hatching and breeding of poultry and the breeding of livestock;
 - (C) Machinery and equipment for use on a farm in the production, processing, and storage of fluid milk for sale;
 - (D) Machinery and equipment for use on a farm in the production of livestock for sale;
 - (E) Machinery and equipment which is used by a producer of poultry, eggs, fluid milk, or livestock for sale for the purpose of harvesting farm crops to be used on the farm by that producer as feed for poultry or livestock;
 - (F) Machinery which is used directly in tilling the soil or in animal husbandry when the machinery is incorporated for the first time into a new farm unit engaged in tilling the soil or in animal husbandry in this state;
 - (G) Machinery which is used directly in tilling the soil or in animal husbandry when the machinery is incorporated as additional machinery for the first time into an existing farm unit already engaged in tilling the soil or in animal husbandry in this state;
 - (H) Machinery which is used directly in tilling the soil or in animal husbandry when the machinery is bought to replace machinery in an existing farm unit already engaged in tilling the soil or in animal husbandry in this state;
 - (I) Rubber-tired farm tractors and attachments to the tractors, and
 - (J) Pecan sprayers, pecan shakers, and other equipment used in harvesting pecans
- (29.1) The sale or use of any off-road equipment and related attachments which are sold to or used by persons engaged primarily in the growing or harvesting of timber
- (30) The sale of a vehicle to a service-connected disabled veteran when the veteran received a grant from the United States Department of Veterans Affairs to purchase and specially adapt the vehicle to his disability;
- (31) The sale of tangible personal property manufactured or assembled in this state for export when delivery is taken outside this state;
- (32) Aircraft, watercraft, motor vehicles, and other transportation equipment manufactured or assembled in this state when sold exclusively outside this state
- (33)(A) The sale of aircraft, watercraft, railroad locomotives and rolling stock, motor vehicles, and major components and replacement parts of each, which will be used principally to cross the borders of this state in the service of transporting passengers or cargo by common carriers.
- (34) The sale of the following types of manufacturing machinery:
- (A) Machinery which is used directly in the manufacture of tangible personal property when the machinery is bought to replace or upgrade machinery in a manufacturing plant presently existing

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in this state and machinery components which are purchased to upgrade machinery used directly in the manufacture of tangible personal property in a manufacturing plant;

(B) Machinery which is used directly in the manufacture of tangible personal property when the machinery is incorporated for the first time into a new manufacturing plant located in this state;

(C) Machinery which is used directly in the manufacture of tangible personal property when the machinery is incorporated as additional machinery for the first time into a manufacturing plant presently existing in this state;

(34.1)(A) The sale of primary material handling equipment which is used directly for the handling and movement of tangible personal property and racking systems used for the conveyance and storage of tangible personal property in a warehouse or distribution facility located in this state when such equipment is either part of an expansion, construction or acquisition worth \$5 million or more.

(34.2)(A) The sale or use of machinery or equipment used directly in the remanufacture of aircraft engines or aircraft engine parts or components.

(34.3)(A) The sale in excess of \$15,000 of repair or replacement parts, machinery clothing or replacement machinery clothing, molds or replacement molds, dies or replacement dies, and tooling or replacement tooling for machinery used directly in the manufacture of tangible personal property in a manufacturing plant presently existing in this state.

(35)(A) The sale, use, storage, or consumption of:

(i) Industrial materials for future processing, manufacture, or conversion into articles of tangible personal property for resale when the industrial materials become a component part of the finished product;

(ii) Industrial materials other than machinery and machinery repair parts that are coated upon or impregnated into the product at any stage of its processing, manufacture, or conversion; or

(iii) Materials, containers, labels, sacks, or bags used for packaging tangible personal property for shipment or sale. To qualify for the packaging exemption, the items shall be used solely for packaging and shall not be purchased for reuse;

(36)(A) The sale of machinery and equipment which is incorporated into any facility and used for the primary purpose of reducing or eliminating air or water pollution;

(36.1)(A) The sale of machinery and equipment which is incorporated into any qualified water conservation facility and used for water conservation.

(37) The sale of machinery and equipment for use in combating air and water pollution and any industrial material bought for further processing in the manufacture of tangible personal property for sale or any part of the industrial material or by-product thereof which becomes a wasteful product contributing to pollution problems and which is used up in a recycling or burning process.

(38) Sales of tangible personal property and fees and charges for services by the Rock Eagle 4-H Center;

(39) Sales by any K-12 public or private school of tangible personal property, concessions, or tickets for admission to a school event or function,

(39.1) The use of cargo containers and their related chassis which are owned by or leased to persons engaged in the international shipment of cargo by ocean-going vessels

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- (40) The sale of major components and repair parts installed in military craft, vehicles, and missiles;
- (41) Sales to or by a non-profit child-caring institution.
- (42) The use by, or lease or rental of tangible personal property to, a person who acquires the property from another person where both persons are under 100 percent common ownership and where the person who furnishes, leases, or rents the property has paid sales or use tax on the property.
- (43) Gross revenues generated from all bona fide coin operated amusement machines which vend or dispense music or are operated for skill, amusement, entertainment, or pleasure which are in commercial use and are provided to the public for play
- (44) Sales of motor vehicles to nonresident purchasers for immediate transportation to and use in another state in which the vehicles are required to be registered,
- (45) The sale, use, storage, or consumption of paper stock which is manufactured in this state into catalogs intended to be delivered outside this state for use outside this state;
- (46) Sales to blood banks having a nonprofit status
- (47) Sales of drugs dispensed by prescription and prescription eyeglasses and contact lenses including free samples not intended for resale.
- (48) Sales to licensed commercial fishermen of bait for taking crab.
- (49) Sales of liquefied petroleum gas or other fuel used in a structure in which broilers, pullets, or other poultry are raised;
- (50) Sales of blood measuring devices, other monitoring equipment, or insulin delivery systems used exclusively by diabetics and sales of insulin, insulin syringes, and blood glucose level measuring strips dispensed without a prescription;
- (51) Sales of oxygen prescribed by a licensed physician;
- (52) The sale of hearing aids;
- (53) Sales transactions for which food stamps or WIC coupons are used as the medium of exchange;
- (54) The sale or use of any durable medical equipment as defined under Titles XVIII and XIX of the federal Social Security Act which is paid for directly by funds of the State of Georgia or the United States under the medicare or Medicaid programs where state or federal law or regulation authorizing such payment prohibits the payment of sales and use tax in connection therewith.
- (54.1) The sale or use of any physician prescribed prosthetic device;
- (55) The sale of lottery tickets
- (56) Sales by any nonprofit parent-teacher organization.
- (57)(A) The sale for off-premises human consumption or use of eligible foods and beverages,

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(58)(A) Sales to or use by a government contractor of Department of Defense or NASA of materials used in administration of a contract with the United States government to which title passes immediately to the government under the terms of the contract.

(B) Sales of eligible food and beverages to and by member councils of the Girl Scouts of the U.S.A. in connection with fundraising activities of any such council.

(C) Sales of eligible food and beverages to and by member councils of the Boy Scouts of America in connection with fundraising activities of any such council;

(60) The sale of machinery and equipment which is incorporated into any telecommunications manufacturing facility and used for the primary purpose of improving air quality in advanced technology clean rooms of Class 100,000 or less, provided such clean rooms are used directly in the manufacture of tangible personal property;

(61) Printed advertising inserts or advertising supplements distributed in this state in or as part of any newspaper for resale;

(62) The sale of grass sod of all kinds and character when such sod is in the original state of production or condition of preparation for sale.

(63) The sale or use of funeral merchandise, outer burial containers, and cemetery markers, which are purchased with funds received from the Georgia Crime Victims Emergency Fund

(64) The sale of electricity for the operation of an irrigation system which is used on a farm exclusively for the irrigation of farm crops;

(65)(A) Sales of dyed diesel fuel exclusively used to operate vessels or boats in the commercial fishing trade by licensed commercial fishermen.

(66) Sales of gold, silver, or platinum bullion or any combination of such bullion,

(67) Sales of coins or currency or a combination of coins and currency,

(68)(A) The sale or lease of computer equipment to be incorporated into a facility or facilities in this state to any high-technology company

(69) The sale of machinery, equipment, and materials incorporated into and used in the construction or operation of a clean room of Class 100 or less in this state, not to include the building or any permanent, nonremovable component of the building that houses such clean room, provided that such clean room is used directly in the manufacture of tangible personal property in this state;

(70)(B) The sale of natural or artificial gas used directly in the production of electricity which is subsequently sold.

(71) Sales to or by any nonprofit organization which has as its primary purpose the raising of funds for books, materials, and programs for public libraries.

(72) The sale or use, to or by permanently disabled persons, of wheelchairs and any accompanying equipment, including seating equipment, all of which is manually or mechanically attached or adapted to such wheelchairs;

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(73)(A) The sale or lease of production equipment or production services for use in this state by a certified film producer or certified film production company for qualified production activities.

(74)(A)(i) The sale or use of digital broadcast equipment by a federally licensed commercial or public radio or television broadcast station, a cable network, or a cable distributor.

(75)(A) Sales tax holiday

(76) Until January 1, 2007, sales of tangible personal property to, or used in the construction of, an aquarium owned or operated by an organization which is exempt from taxation, i.e., the Georgia Aquarium.

(77) Sales of liquefied petroleum gas or other fuel used in a structure in which plants, seedlings, nursery stock, or floral products are raised primarily for the purposes of making sales of such plants, seedlings, nursery stock, or floral products for resale;

(78)(A) Until September 1, 2009, sales of tangible personal property used in direct connection with the construction of a new symphony hall facility owned or operated by an organization which is exempt from taxation, i.e., the Atlanta Symphony Hall.

(79) The sale or use of ice for chilling poultry or vegetables in processing for market and for chilling poultry or vegetables in storage rooms, compartments, or delivery trucks;

(80)(A) Until December 31, 2007, sales of tangible personal property to, or used in or for the new construction of an eligible corporate attraction, i.e., the new Coke Museum.

(81) The sale of food and non-alcoholic beverages to an airline for service to passengers and crew.

(82)(A) A sales tax holiday for the purchase of specified energy efficient products.

Other Exemptions:

(48-8-3.1) Motor fuels are exempt from the first 3 percent of the sales tax.

(48-8-4) Livestock, poultry, farm products produced by the farmer and used by his family.

(48-8-5) Agricultural commodities sold by a non-producer to a person for the purpose of preparing, finishing, or manufacturing the agricultural commodity for the final retail consumer.

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About The Fiscal Research Center

The Fiscal Research Center provides nonpartisan research, technical assistance, and education in the evaluation and design of state and local fiscal and economic policy, including both tax and expenditure issues. The Center's mission is to promote development of sound public policy and public understanding of issues of concern to state and local governments.

The Fiscal Research Center (FRC) was established in 1995 in order to provide a stronger research foundation for setting fiscal policy for state and local governments and for better-informed decision making. The FRC, one of several prominent policy research centers and academic departments housed in the School of Policy Studies, has a full-time staff and affiliated faculty from throughout Georgia State University and elsewhere who lead the research efforts in many organized projects.

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Financing an Increased State Role in Funding K-12 Education: An Analysis of Issues and Options

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